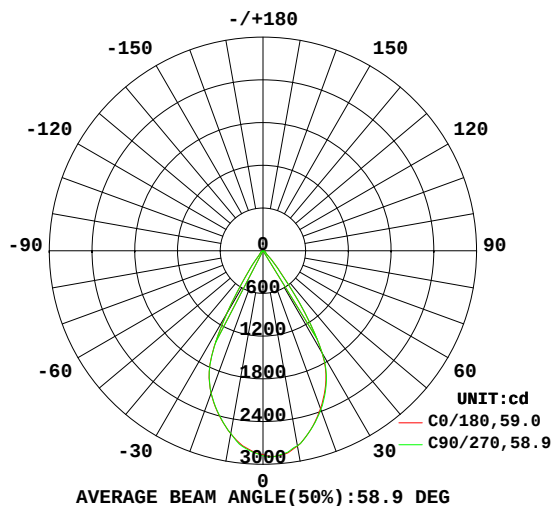


LUMINAIRE PHOTOMETRIC TEST REPORT

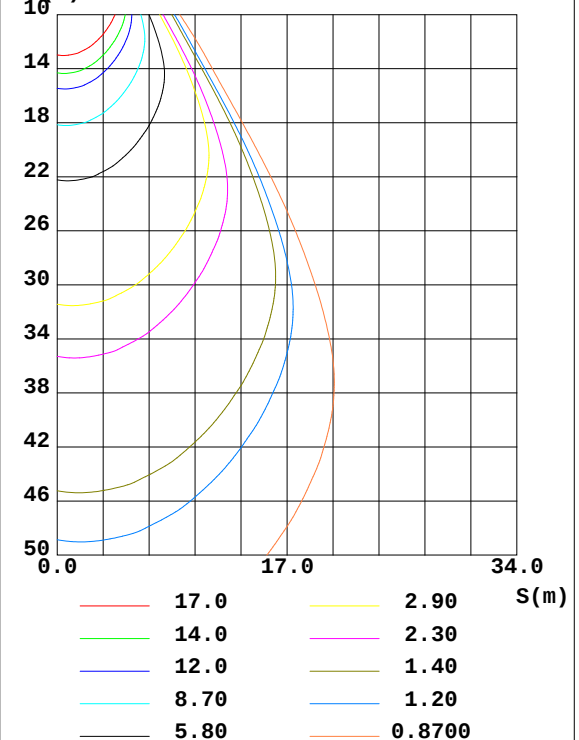
Test:U:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.67 lm/W			
MODEL	TB25141209 5700K	I _{max} (cd)	2915	S/MH(C0/180)	0.80
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	0.80
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	2410.1	η UP, DN(C0-180)	0.0, 55.2
NOMINAL FLUX(lm)	2410.1	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 44.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.90

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: 2024-05-10

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:

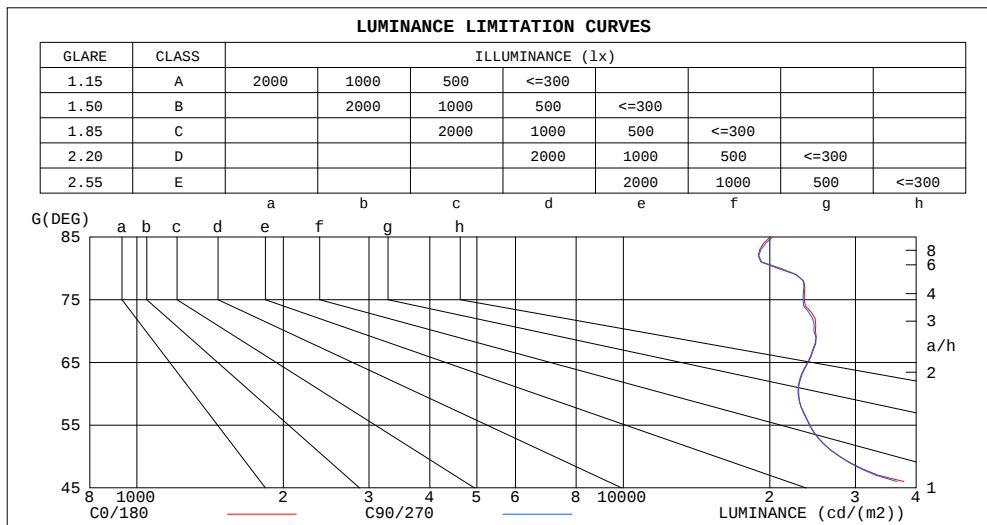
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2784	2804	2782	2710	2609	2571	2608	2694	0- 10	265.9	265.9	11,11
20	2362	2371	2375	2322	2132	2046	2129	2257	10- 20	697.6	963.5	40,40
30	1666	1749	1674	1410	1016	875.3	1014	1328	20- 30	857.5	1821	75.6,75.6
40	330.1	368.0	321.7	207.6	112.7	98.80	124.0	214.1	30- 40	414.6	2236	92.8,92.8
50	61.21	63.84	61.19	54.25	49.26	47.79	48.97	53.41	40- 50	79.39	2315	96.1,96.1
60	39.09	39.94	39.23	37.35	35.77	35.25	35.29	36.51	50- 60	39.97	2355	97.7,97.7
70	29.03	30.13	28.82	26.06	22.06	20.95	21.88	25.31	60- 70	31.79	2387	99,99
80	12.32	14.14	12.49	9.323	7.023	6.293	6.942	8.662	70- 80	18.62	2405	99.8,99.8
90	1.490	2.100	1.498	0.1930	0.0849	0.0811	0.0811	0.0695	80- 90	4.820	2410	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:2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	20075	20283
80	20741	21031
75	23553	23412
70	24822	24635
65	23924	23998
60	22861	22940
55	24189	24129
50	27842	27835
45	47475	44760

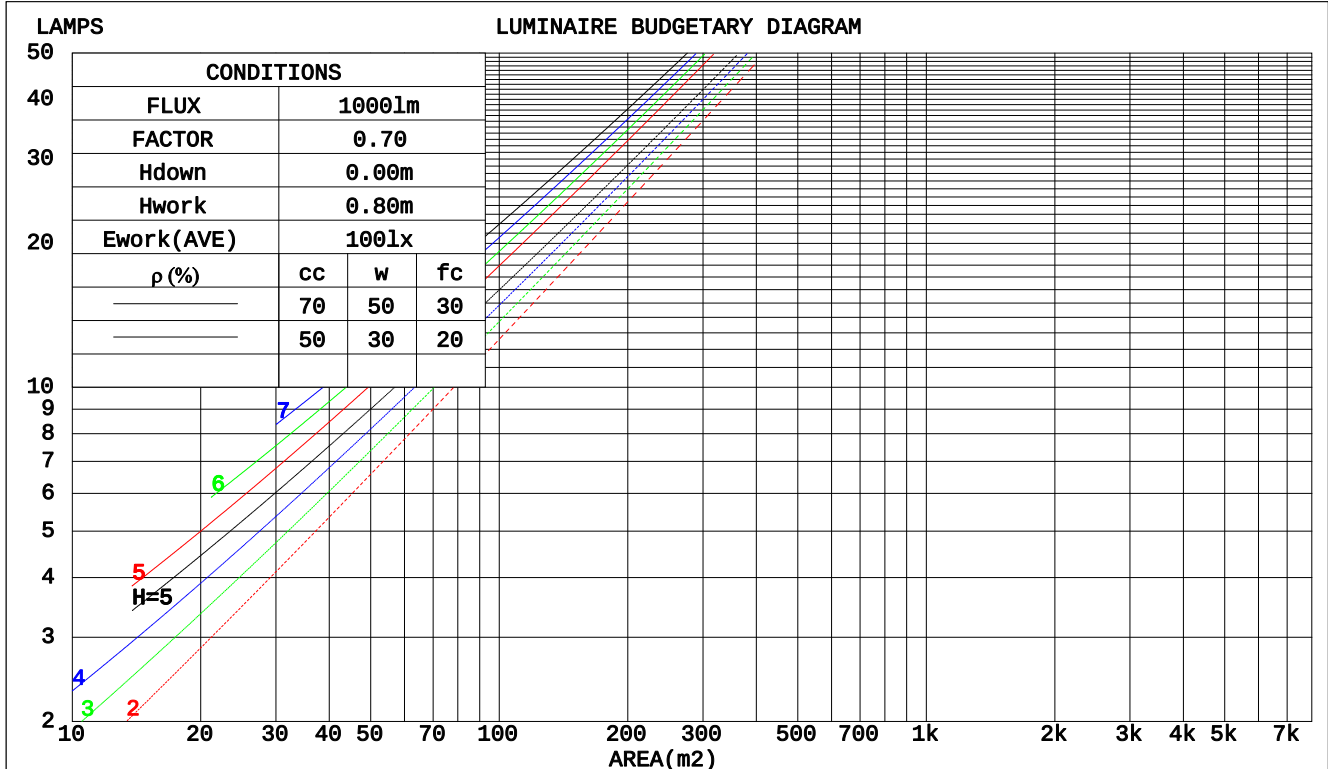
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	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	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.95	.90	.86	.92	.88	.85	.89	.86	.84	.87	.85	.82	.81
4.0	.90	.84	.80	.89	.83	.80	.86	.82	.79	.84	.81	.78	.83	.79	.77	.75
5.0	.84	.78	.74	.83	.78	.74	.81	.77	.73	.80	.76	.72	.78	.75	.72	.70
6.0	.79	.73	.69	.78	.73	.69	.77	.72	.68	.76	.71	.68	.74	.70	.67	.66
7.0	.75	.69	.65	.74	.68	.64	.73	.68	.64	.72	.67	.64	.70	.66	.63	.62
8.0	.71	.65	.61	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.63	.60	.58
9.0	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.56	.64	.59	.56	.55
10.0	.63	.58	.54	.63	.57	.54	.62	.57	.54	.61	.57	.53	.61	.56	.53	.52



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm					
NAME: TH25-WHTC30C023P			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 66mm		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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.182	.104	.033	.176	.100	.032	.163	.093	.030	.151	.087	.028	.141	.082	.026	
2.0	.173	.095	.029	.168	.092	.028	.157	.087	.027	.147	.083	.026	.138	.078	.025	
3.0	.164	.087	.026	.159	.085	.026	.150	.081	.025	.142	.078	.024	.134	.074	.023	
4.0	.155	.081	.024	.151	.079	.023	.143	.076	.023	.136	.073	.022	.129	.070	.021	
5.0	.148	.075	.022	.144	.074	.022	.137	.071	.021	.131	.069	.021	.125	.067	.020	
6.0	.140	.070	.020	.137	.069	.020	.131	.067	.020	.126	.065	.019	.120	.063	.019	
7.0	.134	.066	.019	.131	.065	.019	.126	.064	.018	.121	.062	.018	.116	.060	.018	
8.0	.128	.063	.018	.126	.062	.017	.121	.060	.017	.116	.059	.017	.112	.058	.017	
9.0	.123	.059	.017	.120	.059	.016	.116	.057	.016	.112	.056	.016	.108	.055	.016	
10.0	.118	.056	.016	.116	.056	.016	.112	.055	.015	.108	.054	.015	.105	.053	.015	

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	.171	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.125	.087	.059	.107	.076	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.101	.068	.043	.070	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.111	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005	
8.0	.105	.064	.036	.091	.056	.031	.063	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.060	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.095	.055	.027	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm											
NAME: TH25-WHTC30C023P					TYPE:			WEIGHT:			
SPEC.: white RA90 3000K+5700K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 66mm			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	21.5	22.5	21.8	22.7	22.8	21.5	22.5	21.7	22.6	22.8	
	3H	21.6	22.5	21.9	22.7	22.9	21.6	22.5	21.9	22.7	22.9
	4H	21.7	22.5	22.0	22.8	23.0	21.7	22.5	21.9	22.7	22.9
	6H	21.8	22.5	22.1	22.8	23.0	21.7	22.5	22.0	22.7	23.0
	8H	21.8	22.5	22.1	22.8	23.0	21.7	22.5	22.0	22.7	23.0
	12H	21.8	22.5	22.1	22.7	23.0	21.7	22.4	22.0	22.7	23.0
4H	2H	21.4	22.2	21.7	22.4	22.7	21.4	22.2	21.6	22.4	22.6
	3H	21.6	22.3	21.9	22.6	22.9	21.6	22.3	21.9	22.5	22.8
	4H	21.8	22.4	22.1	22.7	23.0	21.7	22.4	22.1	22.7	23.0
	6H	21.9	22.5	22.3	22.8	23.2	21.9	22.4	22.2	22.8	23.1
	8H	21.9	22.5	22.3	22.8	23.2	21.9	22.4	22.3	22.8	23.1
	12H	21.9	22.4	22.4	22.8	23.2	21.9	22.4	22.3	22.8	23.2
8H	4H	21.8	22.3	22.2	22.6	23.0	21.7	22.2	22.1	22.6	23.0
	6H	22.0	22.4	22.4	22.8	23.2	21.9	22.4	22.4	22.8	23.2
	8H	22.0	22.4	22.5	22.8	23.3	22.0	22.4	22.4	22.8	23.2
	12H	22.1	22.4	22.6	22.9	23.3	22.1	22.4	22.5	22.8	23.3
12H	4H	21.7	22.2	22.1	22.6	23.0	21.7	22.2	22.1	22.5	22.9
	6H	22.0	22.4	22.4	22.8	23.2	21.9	22.3	22.4	22.7	23.2
	8H	22.1	22.4	22.5	22.8	23.3	22.0	22.3	22.5	22.8	23.3
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 2.1 / - 2.3					+ 2.2 / - 2.3					
1.5H	+ 4.2 / - 2.3					+ 4.3 / - 2.2					
2.0H	+ 1.1 / - 0.5					+ 1.0 / - 0.4					

CIE Pub.117, 2410 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.1$)
Area: 0.00342 m²

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:

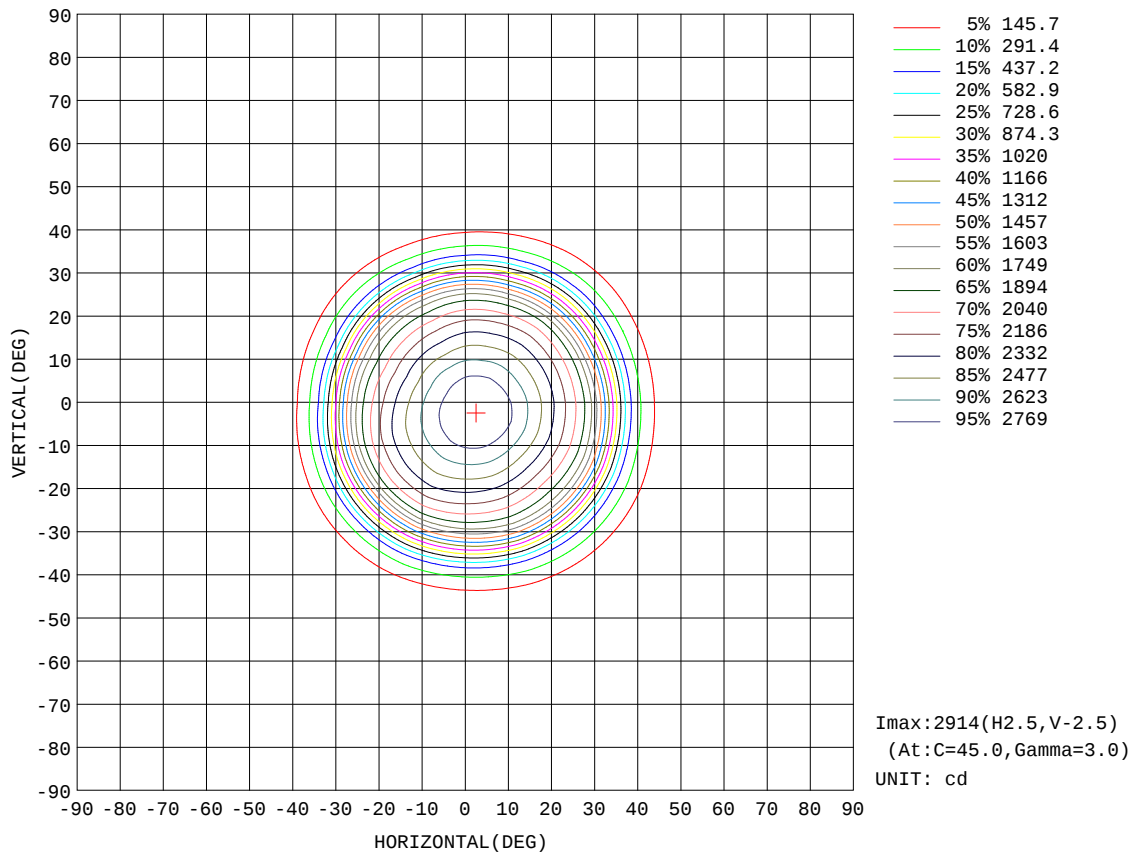
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	94	89	85	94	88	85	93	88	84	81
1.00	99	93	89	98	93	89	96	93	89	85
1.25	103	97	94	102	97	94	100	96	93	88
1.50	105	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	107	104	106	104	102	95
4.00	114	111	108	112	109	107	108	106	104	97
5.00	115	113	111	113	111	109	109	107	106	98
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:2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:

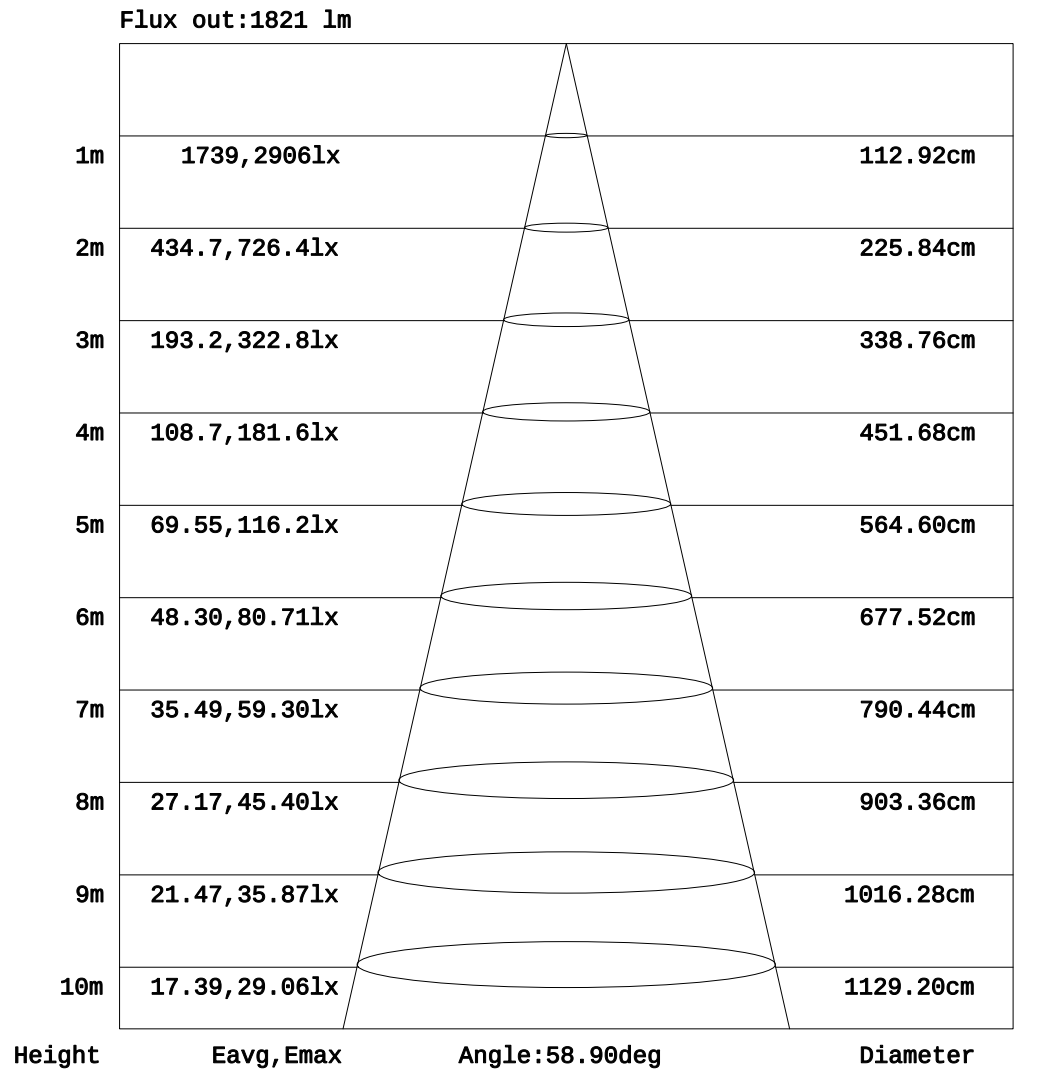


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:



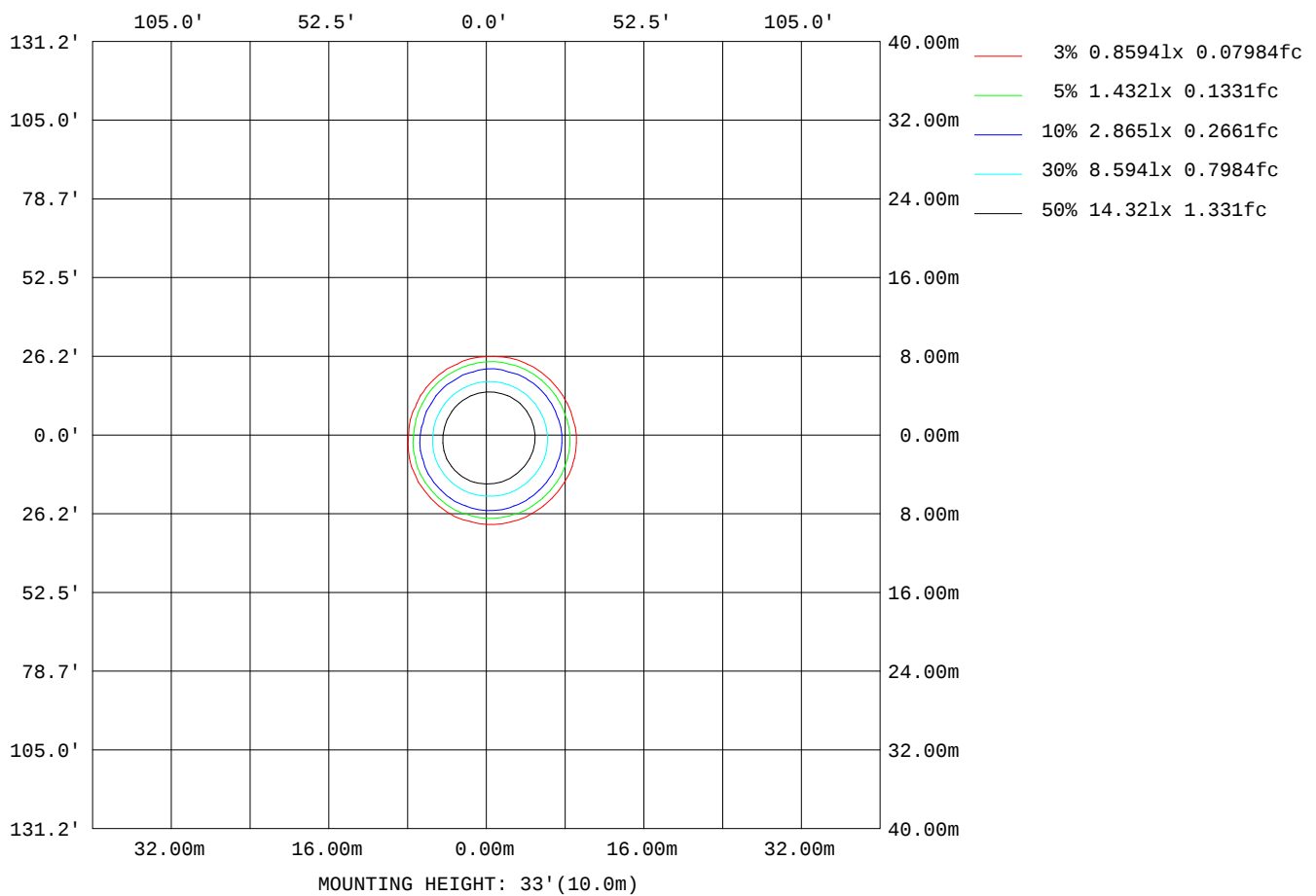
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2024-05-10

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:230.73V I:0.1253A P:28.131W PF:0.9732 Freq:49.99Hz Lamp Flux:2410.1x1 lm		
NAME: TH25-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 66mm	Shielding Angle:

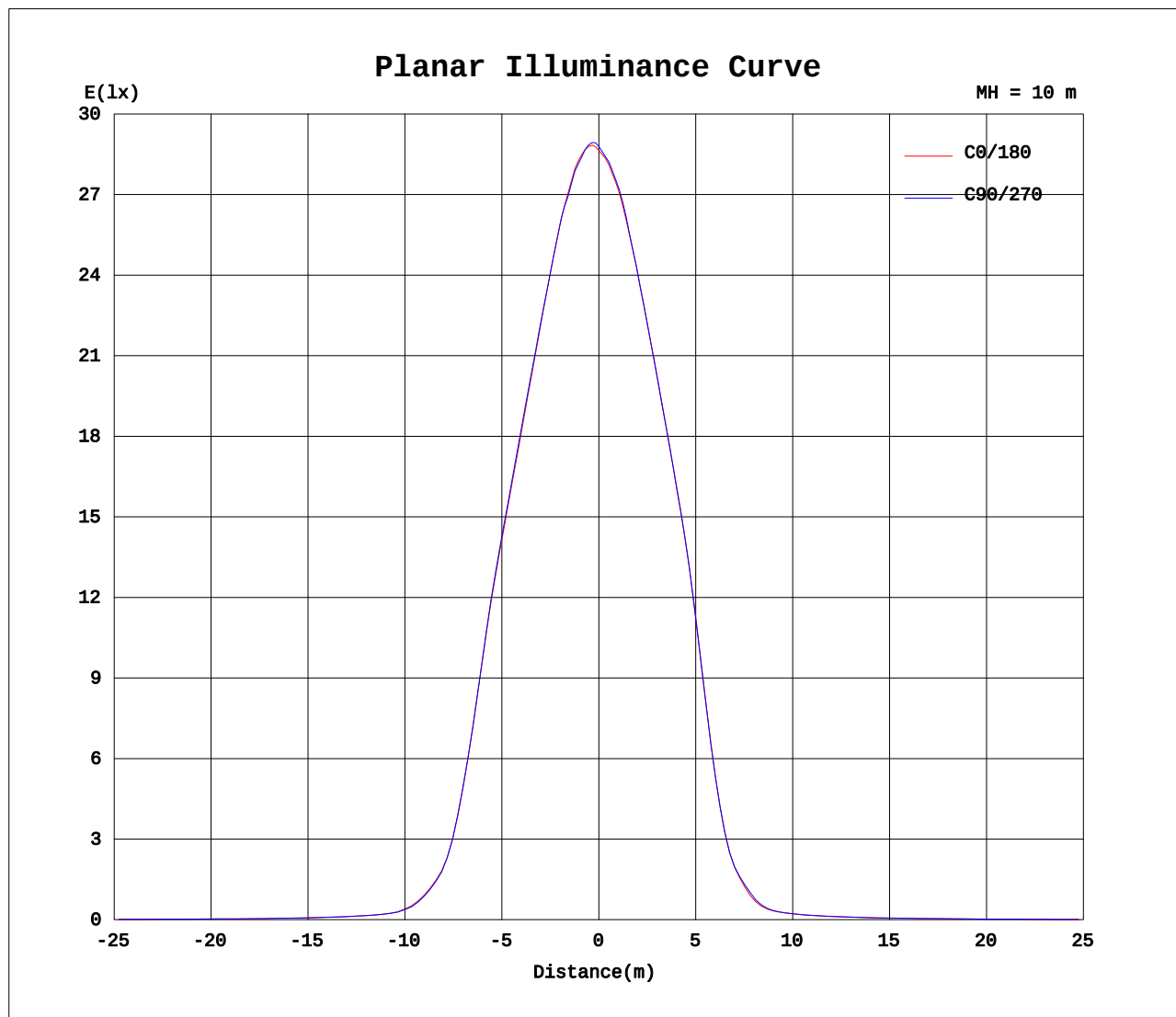
AvgL	cd/m2
L_0~180(65)av	22570
L_0~180(75)av	20113
L_0~180(85)av	13987
L_90~270(65)av	22491
L_90~270(75)av	19930
L_90~270(85)av	13994
L_45(65)av	22378
L_45(75)av	19947
L_45(85)av	13955

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-10

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: 2024-05-10

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:

```