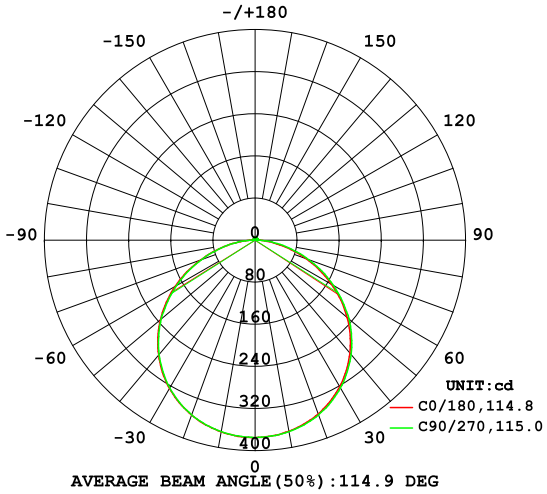
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

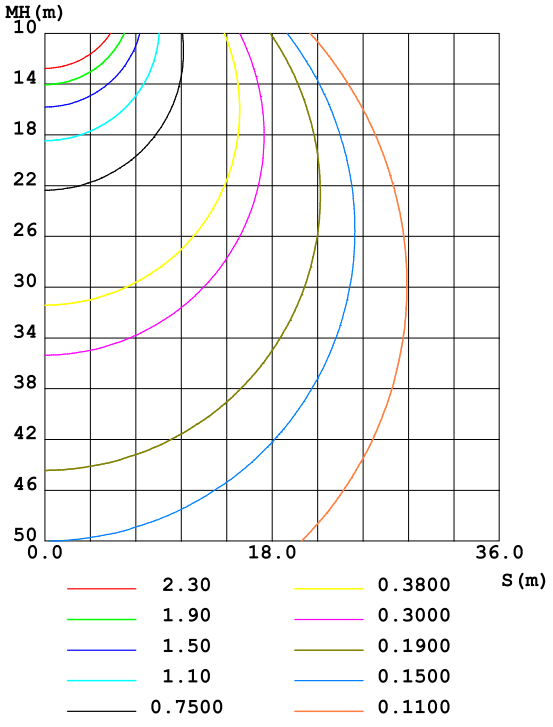
DATA OF LAMP		PHOTOMETRIC DATA Eff: 62.18 lm/W			
MODEL	3000K	Imax(cd)	375.2	S/MH(C0/180)	1.29
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1134.3	η UP,DN(C0-180)	1.1,48.5
NOMINAL FLUX(lm)	1134.29	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.1,49.3
LAMPS INSIDE	1	η up(%)	2.2	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	97.8	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):114.9 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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	368.8	369.6	369.8	369.6					0- 10	35.53	35.53	3.13,3.13
20	351.4	353.1	353.4	353.1					10- 20	102.3	137.9	12.2,12.2
30	321.4	324.4	325.3	324.4					20- 30	156.6	294.5	26,26
40	280.4	283.7	285.4	283.7					30- 40	190.8	485.3	42.8,42.8
50	228.2	232.8	234.6	232.8					40- 50	199.6	684.9	60.4,60.4
60	167.5	172.2	175.1	172.2					50- 60	181.0	865.9	76.3,76.3
70	102.8	108.6	110.4	108.6					60- 70	138.4	1004	88.5,88.5
80	42.86	48.21	49.06	48.21					70- 80	80.77	1085	95.7,95.7
90	2.809	3.147	4.094	3.147					80- 90	24.60	1110	97.8,97.8
100	3.135	3.125	3.085	3.125					90-100	3.234	1113	98.1,98.1
110	3.532	3.522	3.483	3.522					100-110	3.503	1116	98.4,98.4
120	3.907	3.882	3.858	3.882					110-120	3.673	1120	98.7,98.7
130	4.226	4.219	4.185	4.219					120-130	3.632	1124	99.1,99.1
140	4.508	4.520	4.456	4.520					130-140	3.372	1127	99.4,99.4
150	4.790	4.772	4.742	4.772					140-150	2.908	1130	99.6,99.6
160	5.102	5.114	5.050	5.114					150-160	2.277	1132	99.8,99.8
170	5.325	5.384	5.299	5.384					160-170	1.480	1134	100,100
180	5.521	5.488	5.529	5.488					170-180	0.5166	1134	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 585.66 lm

%lum = 51.6%
%lamp = 51.6%

Conical surface Flux(130deg): 941.67 lm

%lum = 83.0%
%lamp = 83.0%

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 2024

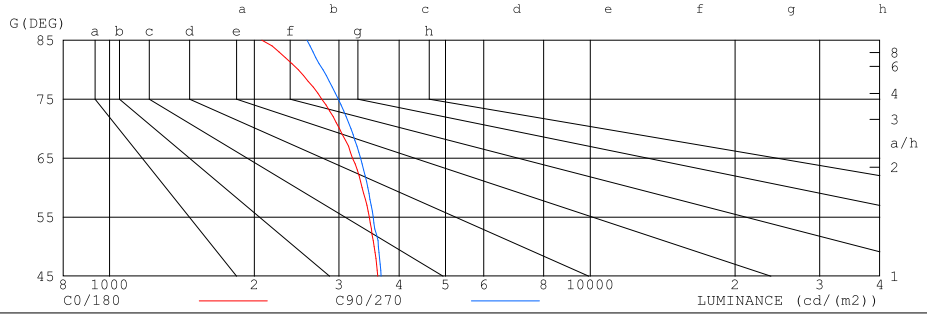
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.471
Humidity:65.0%
Test Distance:7.382m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2072	2575
80	2469	2777
75	2764	2992
70	3007	3177
65	3202	3327
60	3350	3444
55	3469	3533
50	3551	3622
45	3615	3669

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:

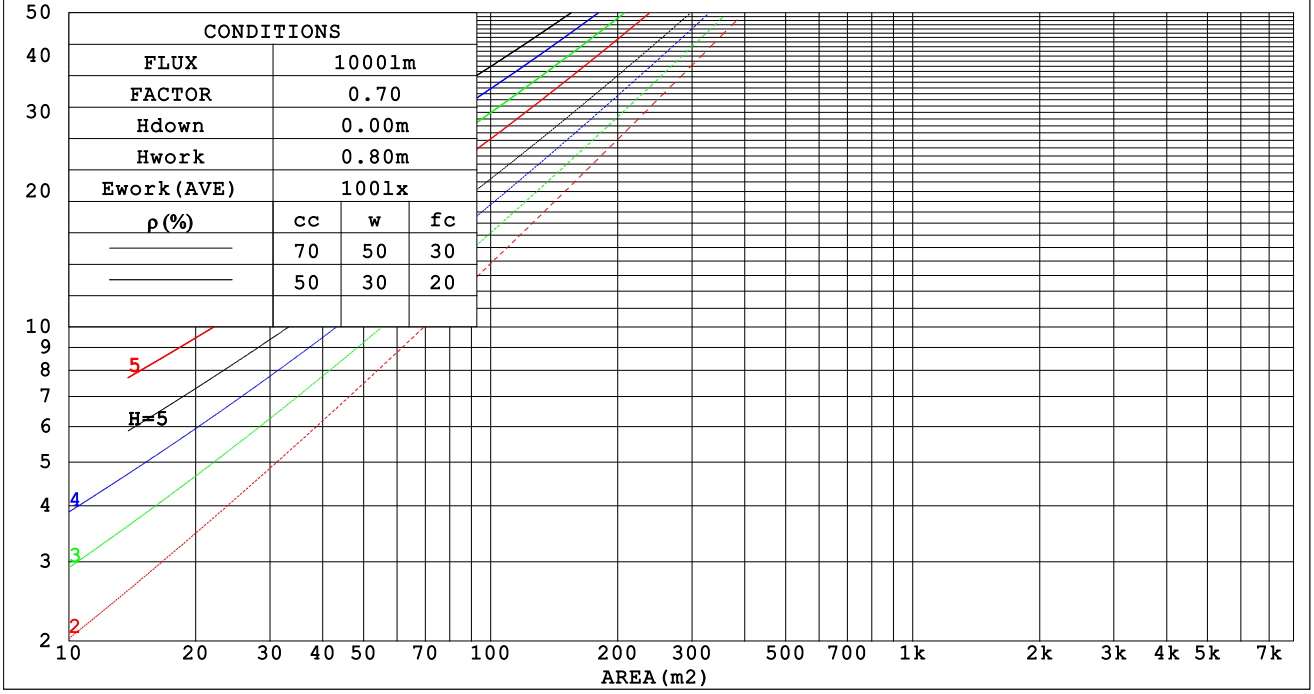
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.81
2.0	.90	.83	.77	.88	.81	.76	.84	.78	.74	.80	.76	.72	.77	.73	.70	.67
3.0	.79	.70	.64	.77	.69	.63	.73	.67	.62	.70	.65	.60	.68	.63	.59	.57
4.0	.69	.61	.54	.68	.60	.53	.65	.58	.52	.63	.56	.51	.60	.55	.50	.48
5.0	.62	.53	.46	.61	.52	.46	.58	.51	.45	.56	.50	.44	.54	.48	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.32	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.34	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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 Coeffcients(WEC)									
0.0																
1.0	.314	.179	.057	.307	.175	.056	.292	.168	.054	.279	.161	.052	.266	.154	.050	
2.0	.294	.161	.049	.287	.158	.049	.275	.153	.047	.263	.147	.046	.252	.142	.045	
3.0	.272	.145	.043	.266	.142	.043	.254	.138	.042	.244	.134	.041	.234	.129	.040	
4.0	.250	.130	.038	.245	.128	.038	.235	.125	.037	.225	.121	.037	.217	.118	.036	
5.0	.231	.118	.034	.226	.116	.034	.217	.113	.033	.209	.110	.033	.201	.107	.032	
6.0	.214	.107	.031	.210	.106	.031	.202	.103	.030	.194	.101	.030	.187	.099	.029	
7.0	.199	.099	.028	.196	.097	.028	.188	.095	.027	.181	.093	.027	.175	.091	.027	
8.0	.186	.091	.026	.183	.090	.025	.176	.088	.025	.170	.086	.025	.164	.084	.025	
9.0	.174	.084	.024	.171	.083	.023	.165	.082	.023	.160	.080	.023	.154	.078	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.021	.151	.075	.021	.146	.073	.021	

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	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022	
1.0	.197	.173	.151	.169	.148	.130	.115	.102	.090	.066	.059	.052	.021	.019	.017	
2.0	.189	.149	.114	.162	.128	.099	.111	.089	.069	.064	.052	.040	.021	.017	.013	
3.0	.182	.131	.091	.156	.113	.079	.107	.079	.055	.062	.046	.033	.020	.015	.011	
4.0	.174	.118	.075	.149	.102	.065	.103	.071	.046	.059	.042	.027	.019	.014	.009	
5.0	.167	.108	.064	.143	.093	.056	.099	.065	.039	.057	.038	.023	.018	.012	.008	
6.0	.160	.099	.056	.137	.086	.049	.095	.060	.035	.055	.035	.021	.018	.012	.007	
7.0	.153	.092	.050	.131	.080	.044	.091	.056	.031	.053	.033	.018	.017	.011	.006	
8.0	.146	.087	.046	.126	.075	.040	.087	.053	.028	.051	.031	.017	.016	.010	.006	
9.0	.140	.082	.042	.121	.071	.037	.084	.050	.026	.049	.029	.016	.016	.010	.005	
10.0	.134	.077	.040	.116	.067	.035	.080	.047	.025	.047	.028	.015	.015	.009	.005	

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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	16.6	18.1	16.9	18.4	18.6	16.7	18.2	17.0	18.4	18.7
3H	18.1	19.5	18.4	19.8	20.0	18.2	19.6	18.6	19.9	20.2
4H	18.7	20.0	19.0	20.3	20.6	18.9	20.2	19.2	20.5	20.8
6H	19.1	20.3	19.4	20.6	21.0	19.3	20.6	19.7	20.9	21.2
8H	19.2	20.4	19.6	20.7	21.1	19.5	20.7	19.9	21.0	21.4
12H	19.3	20.4	19.7	20.8	21.1	19.6	20.8	20.0	21.1	21.4
4H 2H	17.2	18.5	17.6	18.8	19.1	17.3	18.6	17.6	18.9	19.2
3H	18.9	20.0	19.3	20.4	20.7	19.0	20.2	19.4	20.5	20.9
4H	19.6	20.6	20.0	21.0	21.4	19.8	20.8	20.2	21.2	21.6
6H	20.1	21.1	20.6	21.4	21.9	20.4	21.3	20.8	21.7	22.1
8H	20.3	21.2	20.7	21.6	22.0	20.6	21.5	21.0	21.9	22.3
12H	20.4	21.2	20.9	21.6	22.1	20.7	21.5	21.2	22.0	22.4
8H 4H	19.9	20.7	20.3	21.1	21.6	20.0	20.9	20.5	21.3	21.7
6H	20.5	21.3	21.0	21.7	22.2	20.8	21.5	21.2	21.9	22.4
8H	20.8	21.4	21.3	21.9	22.4	21.1	21.7	21.6	22.2	22.7
12H	21.0	21.6	21.5	22.0	22.6	21.3	21.9	21.8	22.4	22.9
12H 4H	19.9	20.7	20.3	21.1	21.6	20.0	20.8	20.5	21.3	21.7
6H	20.6	21.2	21.1	21.7	22.2	20.8	21.5	21.3	21.9	22.4
8H	20.9	21.5	21.4	21.9	22.5	21.2	21.7	21.7	22.2	22.7

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.2 / - 0.2	+ 0.1 / - 0.2
1.5H	+ 0.2 / - 0.3	+ 0.2 / - 0.3
2.0H	+ 0.2 / - 0.3	+ 0.2 / - 0.3

CIE Pub.117, 1134 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)
Area: 0.1 m2

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

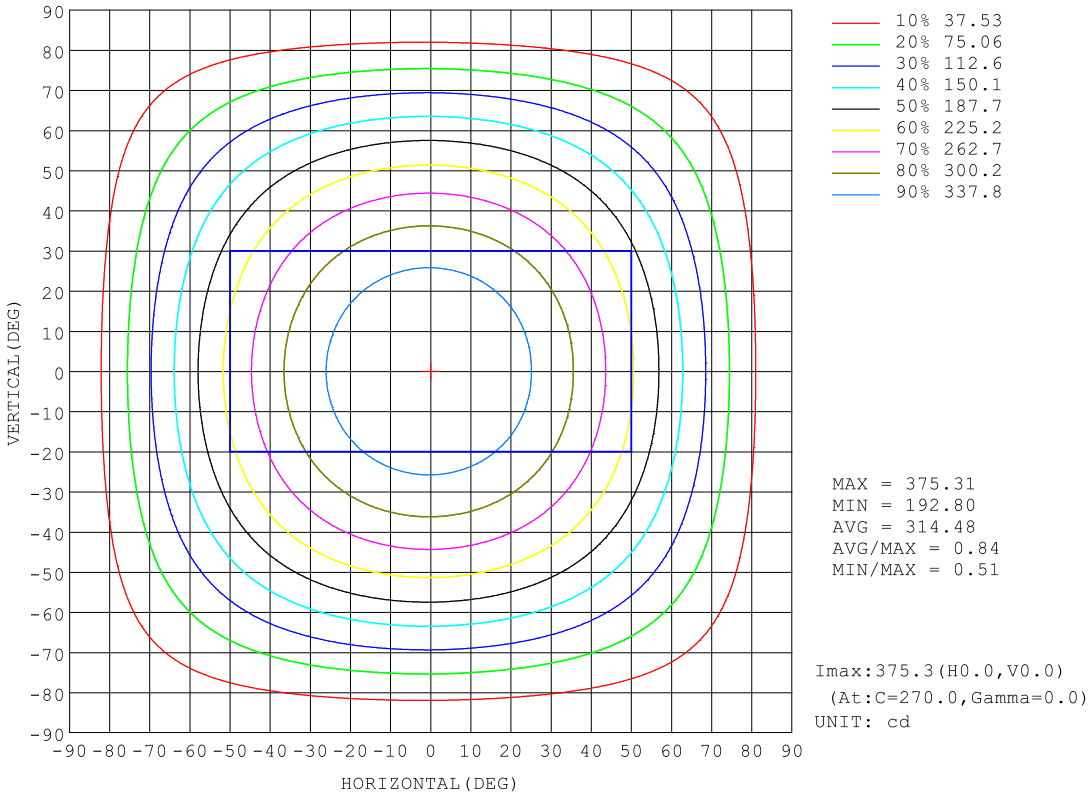
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	56	45	38	56	44	38	54	44	37	31
0.80	66	55	47	65	54	47	63	53	47	39
1.00	75	64	56	73	63	56	71	64	55	48
1.25	82	71	64	80	70	64	77	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	81	76	68
2.50	98	90	84	96	88	83	91	85	81	72
3.00	101	94	89	99	93	87	95	89	85	76
4.00	105	99	95	103	98	93	98	94	90	81
5.00	108	103	99	105	101	97	100	97	94	84
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℃
Operators:DAMIN
Test Date:25 July 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:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

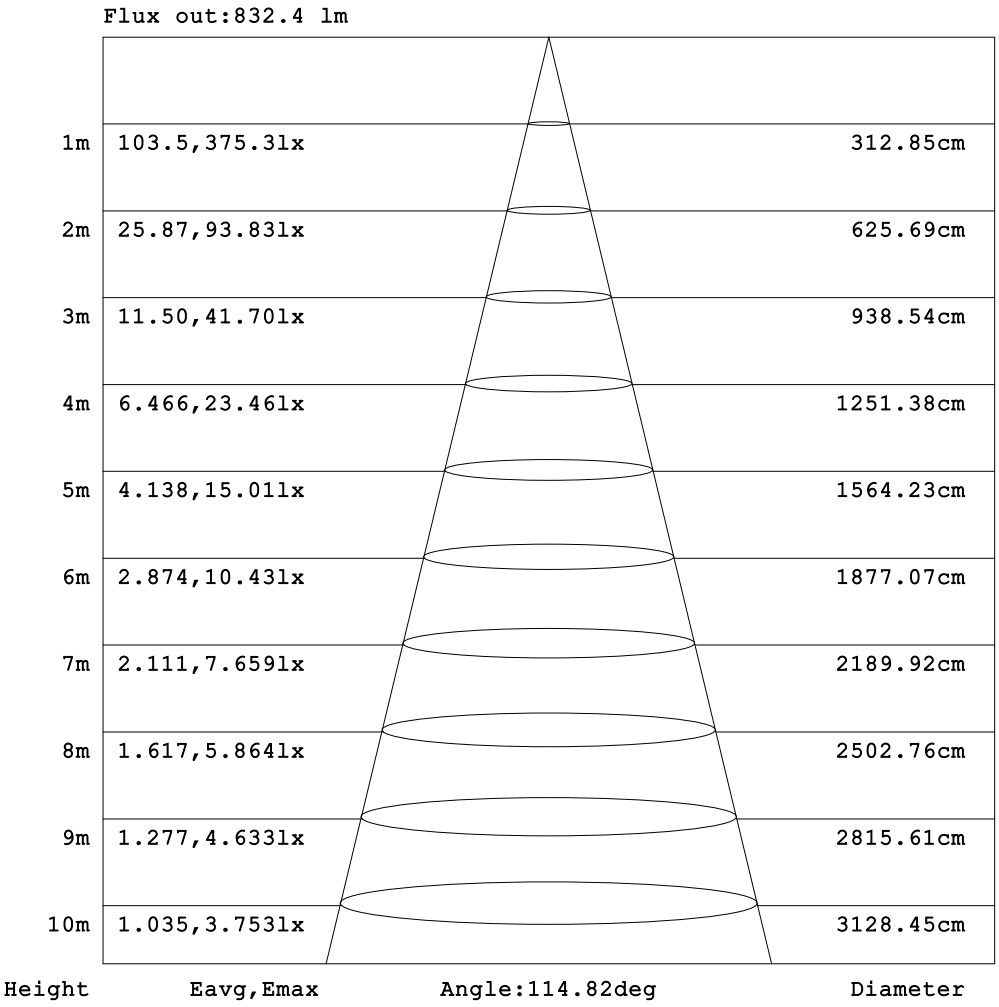


C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 2024

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:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



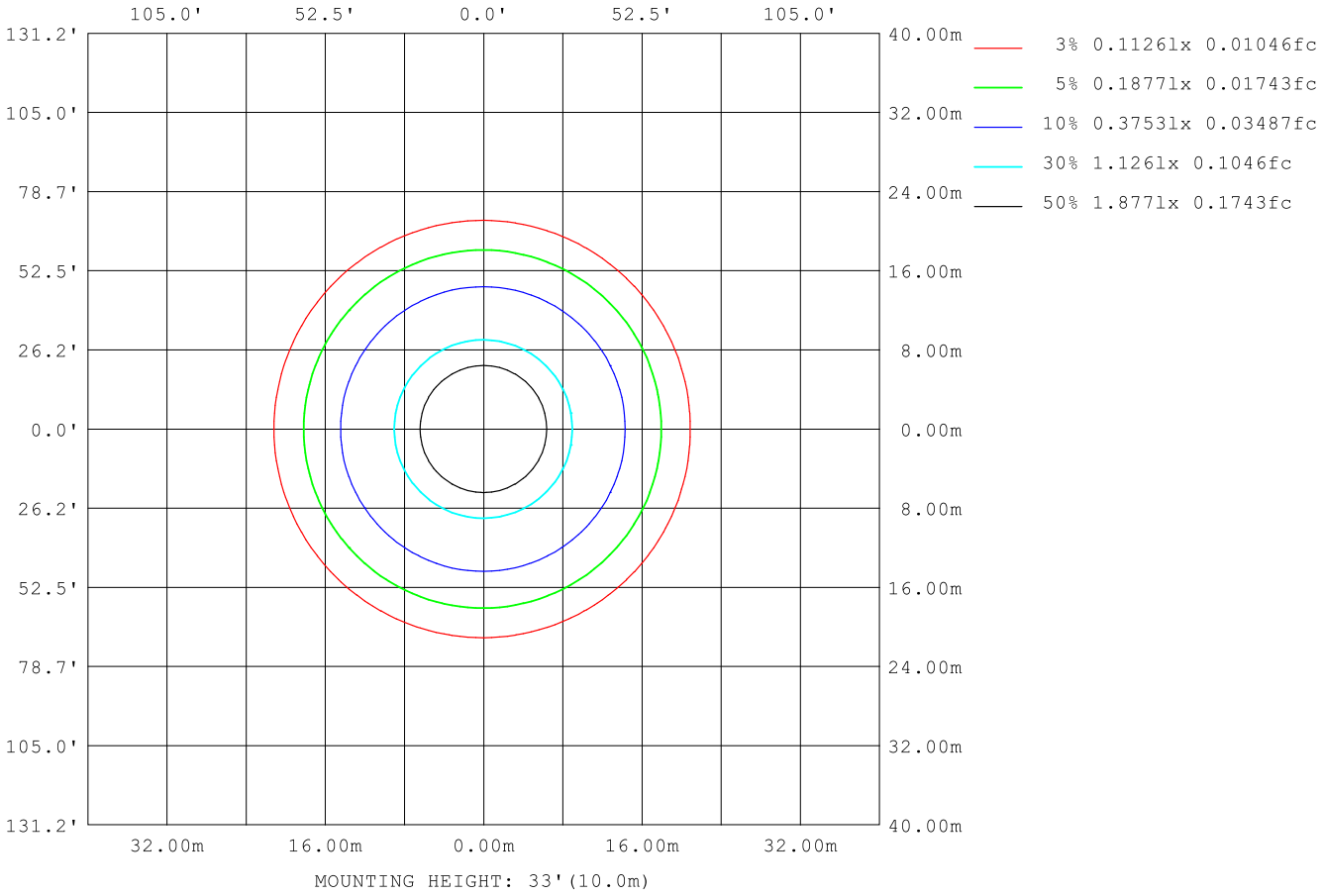
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:

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LED Avg.L Report

Test:U:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

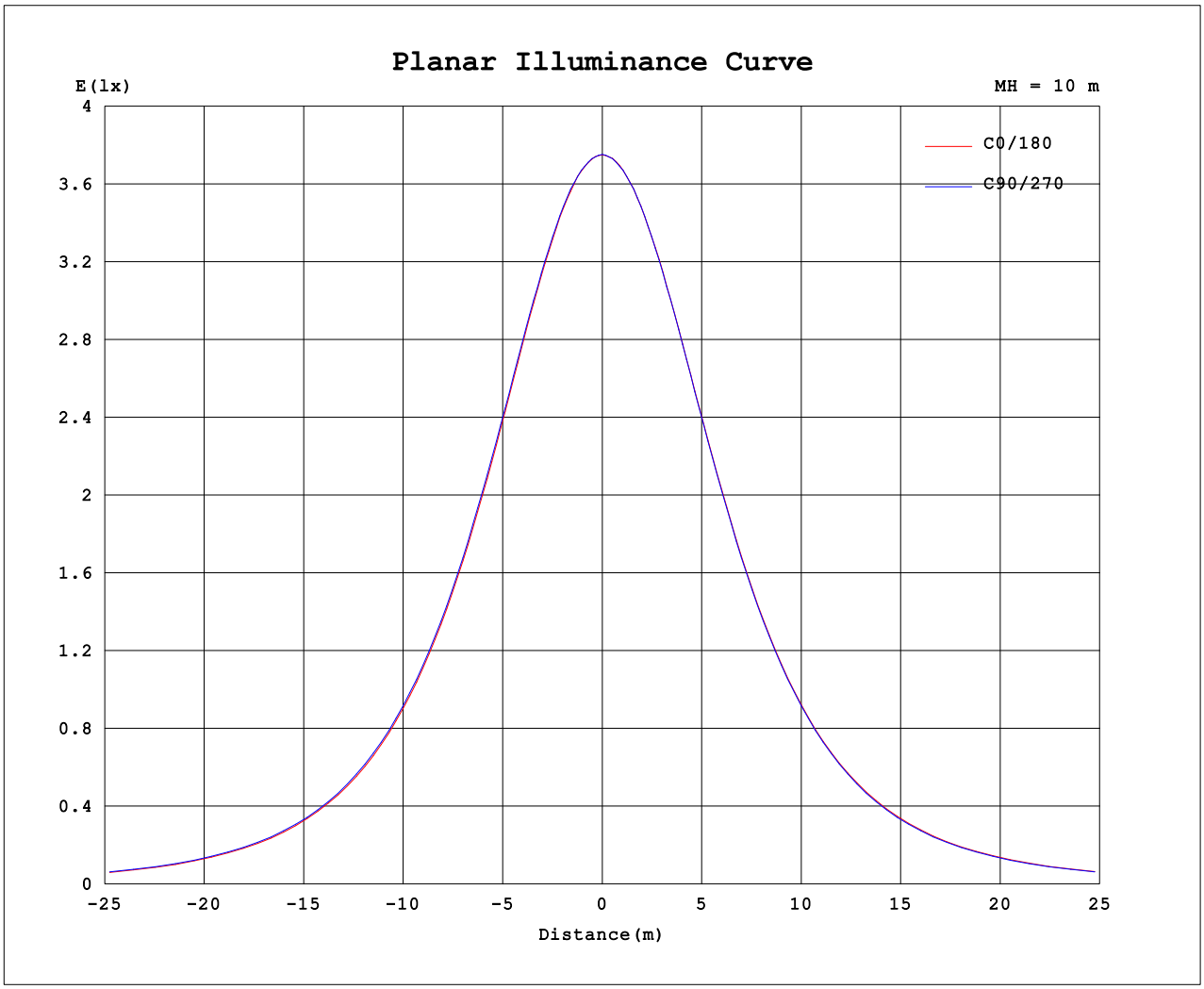
AvgL	cd/m2
L_0~180(65)av	3295
L_0~180(75)av	2897
L_0~180(85)av	2369
L_90~270(65)av	3326
L_90~270(75)av	2992
L_90~270(85)av	2575
L_45(65)av	3320
L_45(75)av	2964
L_45(85)av	2516

Standard: GB/T 29293-2012

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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℃
Operators:DAMIN
Test Date:25 July 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:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.04V I:0.1655A P:18.243W PF:0.9183 Freq:59.98Hz Lamp Flux:1134.29x1 lm		
NAME: 57594WTWT 18W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	90	180	270															
0	375	375	375	375															
5	373	373	374	373															
10	369	370	370	370															
15	361	363	363	363															
20	351	353	353	353															
25	338	340	341	340															
30	321	324	325	324															
35	302	305	307	305															
40	280	284	285	284															
45	256	259	261	259															
50	228	233	235	233															
55	199	203	206	203															
60	167	172	175	172															
65	135	141	143	141															
70	103	109	110	109															
75	71.5	77.4	78.4	77.4															
80	42.9	48.2	49.1	48.2															
85	18.1	22.4	23.2	22.4															
90	2.81	3.15	4.09	3.15															
95	2.95	2.94	2.90	2.94															
100	3.14	3.12	3.09	3.12															
105	3.33	3.32	3.27	3.32															
110	3.53	3.52	3.48	3.52															
115	3.72	3.71	3.68	3.71															
120	3.91	3.88	3.86	3.88															
125	4.08	4.06	4.03	4.06															
130	4.23	4.22	4.18	4.22															
135	4.37	4.37	4.32	4.37															
140	4.51	4.52	4.46	4.52															
145	4.63	4.65	4.59	4.65															
150	4.79	4.77	4.74	4.77															
155	4.94	4.93	4.91	4.93															
160	5.10	5.11	5.05	5.11															
165	5.23	5.28	5.19	5.28															
170	5.32	5.38	5.30	5.38															
175	5.45	5.47	5.40	5.47															
180	5.52	5.49	5.53	5.49															

C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:25 July 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:

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