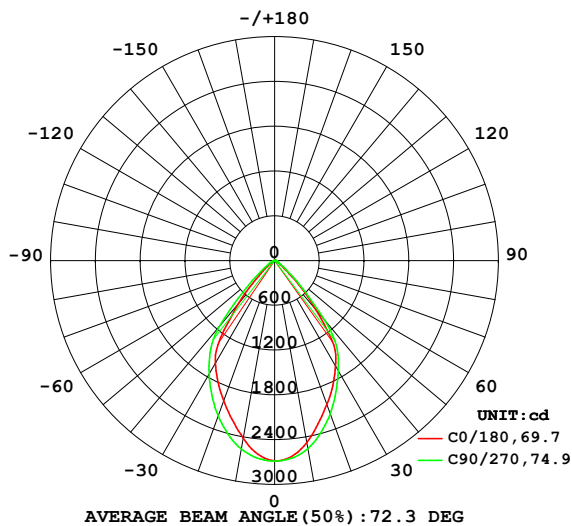


LUMINAIRE PHOTOMETRIC TEST REPORT

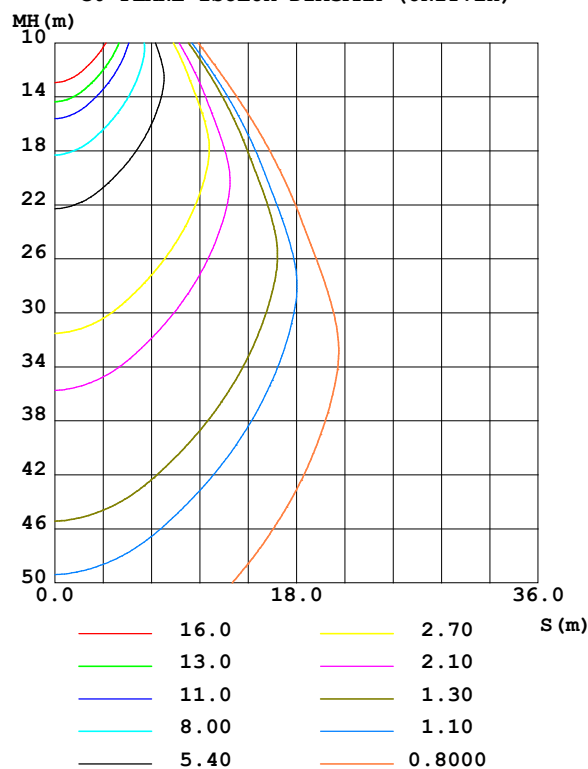
Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.18 lm/W			
MODEL	LED541 B34V2	I _{max} (cd)	2685	S/MH(C0/180)	0.93
NOMINAL POWER(W)	29	LOR(%)	100.0	S/MH(C90/270)	1.00
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3226.9	η UP,DN(C0-180)	0.0,50.6
NOMINAL FLUX(lm)	3226.85	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230	η down (%)	100.0	CIBSE SHR MAX	1.10

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [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	2419	2523	2566	2497	2479	2548	2561	2467	0- 10	247.6	247.6	7.67,7.67
20	1999	2102	2215	2032	2052	2145	2181	1996	10- 20	648.0	895.6	27.8,27.8
30	1589	1556	1757	1597	1636	1577	1710	1543	20- 30	852.6	1748	54.2,54.2
40	760.9	887.6	1157	1269	863.8	902.0	1049	1159	30- 40	835.5	2584	80.1,80.1
50	151.9	183.6	296.2	422.8	193.6	192.4	260.9	343.5	40- 50	447.5	3031	93.9,93.9
60	41.41	44.93	85.68	135.2	49.59	47.71	77.51	122.9	50- 60	123.6	3155	97.8,97.8
70	14.75	24.14	35.16	39.91	17.52	26.38	33.92	29.95	60- 70	46.24	3201	99.2,99.2
80	6.001	11.04	17.46	10.50	7.430	12.65	17.25	8.946	70- 80	18.64	3220	99.8,99.8
90	1.050	3.612	3.472	2.544	1.474	3.526	0.2787	1.106	80- 90	7.174	3227	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): 2872.8 lm

%lum = 89.0%

%lamp = 89.0%

Conical surface Flux(130deg): 3183.3 lm

%lum = 98.6%

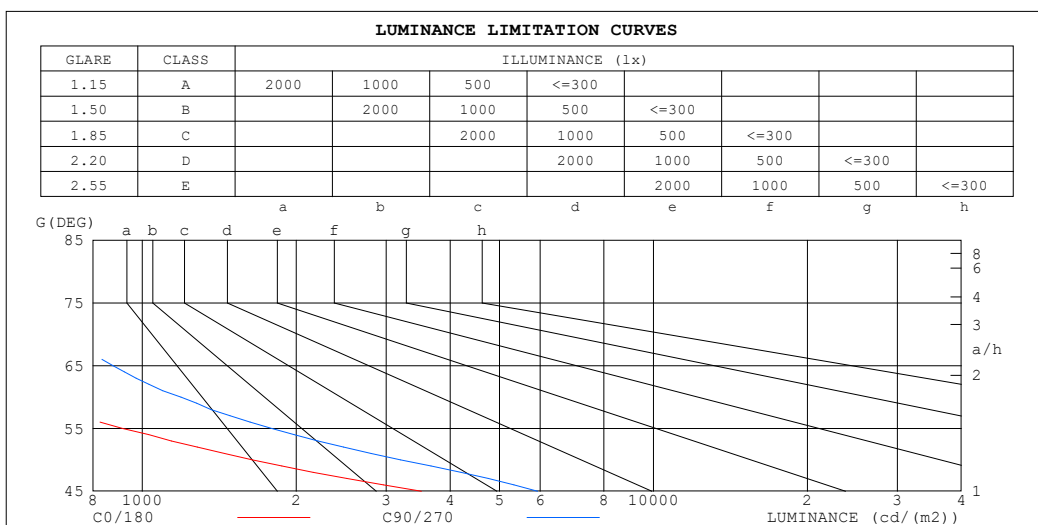
%lamp = 98.6%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2023-04-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:9.640m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	241	827
80	240	698
75	265	688
70	300	714
65	387	877
60	575	1190
55	915	1792
50	1641	3200
45	3514	5930

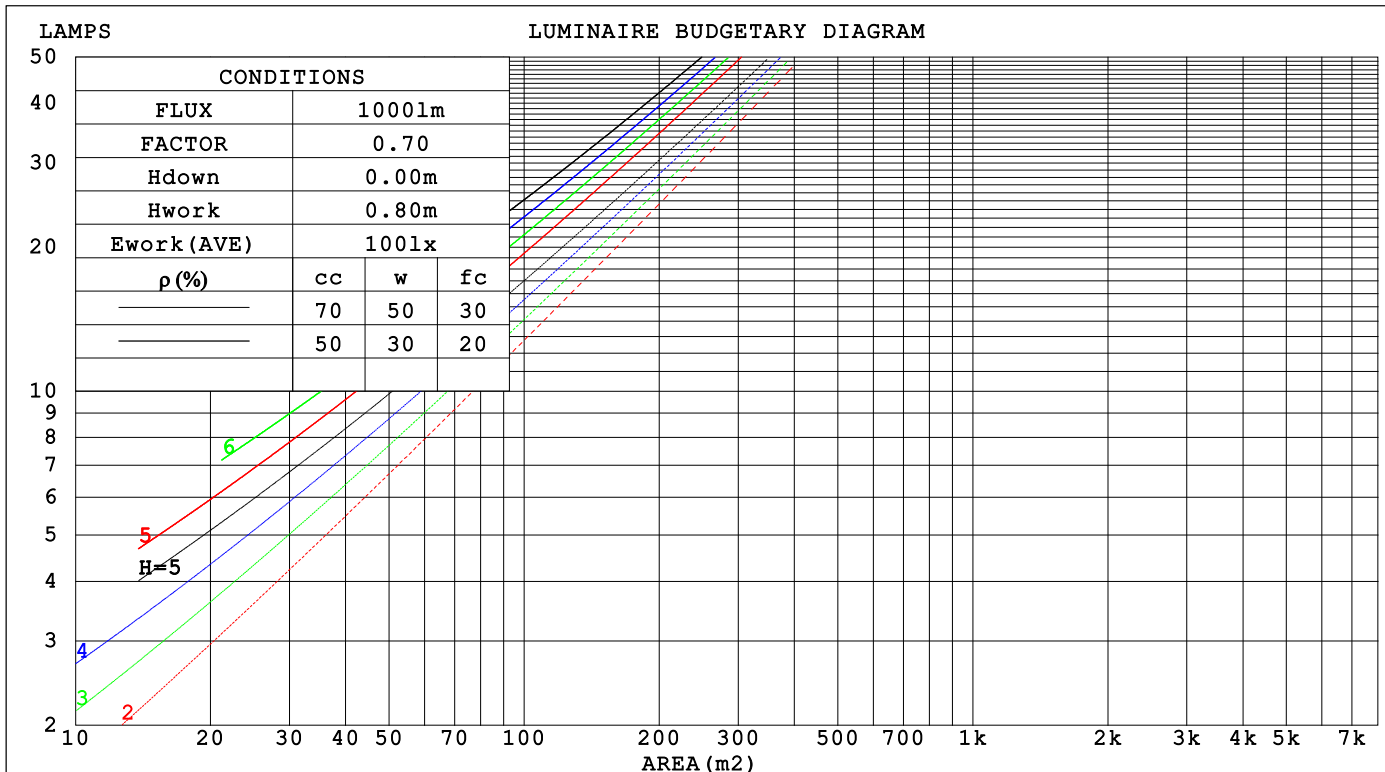
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz			UTHDi:0.00% ITHDi:0.00% KDisp:0			Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)			TYPE: 29W			WEIGHT:		
SPEC.: 4000K			DIM.:			SERIAL No.:		
MFR.: EVERFINE			SUR.: 1.2*0.12			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															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	1.09	1.07	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.95	.94	.92														
2.0	1.00	.96	.92	.99	.94	.91	.95	.92	.89	.92	.89	.87	.90	.87	.85	.83														
3.0	.92	.87	.82	.91	.86	.81	.88	.84	.80	.86	.82	.79	.83	.80	.78	.76														
4.0	.85	.79	.74	.84	.78	.73	.82	.77	.73	.80	.75	.72	.78	.74	.71	.69														
5.0	.79	.72	.67	.78	.71	.67	.76	.70	.66	.74	.69	.65	.72	.68	.65	.63														
6.0	.73	.66	.61	.72	.65	.61	.70	.65	.60	.69	.64	.60	.67	.63	.60	.58														
7.0	.68	.61	.56	.67	.60	.56	.65	.60	.55	.64	.59	.55	.63	.58	.55	.53														
8.0	.63	.56	.52	.62	.56	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.49														
9.0	.59	.52	.48	.58	.52	.48	.57	.51	.47	.56	.51	.47	.55	.51	.47	.46														
10.0	.55	.49	.44	.55	.48	.44	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42														



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	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	.203	.115	.037	.196	.112	.035	.183	.105	.034	.171	.099	.032	.161	.093	.030		
2.0	.196	.107	.033	.190	.105	.032	.179	.100	.031	.169	.095	.030	.160	.090	.029		
3.0	.187	.100	.030	.182	.098	.029	.173	.094	.028	.164	.090	.028	.156	.086	.027		
4.0	.178	.093	.027	.174	.091	.027	.166	.088	.026	.158	.085	.026	.151	.082	.025		
5.0	.169	.086	.025	.166	.085	.025	.159	.083	.024	.152	.080	.024	.146	.078	.023		
6.0	.161	.081	.023	.158	.080	.023	.152	.078	.023	.146	.076	.022	.140	.074	.022		
7.0	.154	.076	.022	.151	.075	.021	.145	.073	.021	.140	.072	.021	.135	.070	.021		
8.0	.146	.072	.020	.144	.071	.020	.139	.069	.020	.134	.068	.020	.129	.066	.019		
9.0	.140	.068	.019	.137	.067	.019	.133	.066	.019	.128	.064	.018	.124	.063	.018		
10.0	.133	.064	.018	.131	.063	.018	.127	.062	.018	.123	.061	.017	.120	.060	.017		

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016		
2.0	.159	.132	.110	.137	.114	.095	.094	.079	.066	.054	.046	.039	.017	.015	.013		
3.0	.149	.114	.086	.127	.098	.075	.087	.068	.052	.050	.040	.031	.016	.013	.010		
4.0	.139	.099	.069	.120	.086	.060	.082	.060	.042	.048	.035	.025	.015	.011	.008		
5.0	.131	.088	.056	.113	.076	.049	.078	.053	.035	.045	.031	.020	.015	.010	.007		
6.0	.125	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006		
7.0	.118	.072	.039	.102	.062	.034	.070	.044	.024	.041	.026	.014	.013	.008	.005		
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004		
9.0	.108	.061	.029	.093	.053	.026	.064	.037	.018	.037	.022	.011	.012	.007	.004		
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.010	.012	.007	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm										
NAME: LED541 B34V2 (29W 4000K)					TYPE: 29W			WEIGHT:		
SPEC.: 4000K					DIM.:			SERIAL No.:		
MFR.: EVERFINE					SUR.: 1.2*0.12			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	13.2	14.3	13.4	14.5	14.7	14.7	15.9	15.0	16.0	16.2
3H	13.1	14.1	13.3	14.3	14.5	14.7	15.7	14.9	15.9	16.1
4H	13.0	13.9	13.3	14.2	14.4	14.6	15.6	14.9	15.8	16.1
6H	12.9	13.8	13.2	14.1	14.3	14.6	15.5	14.9	15.8	16.0
8H	12.9	13.7	13.2	14.0	14.3	14.6	15.5	14.9	15.7	16.0
12H	12.8	13.7	13.2	13.9	14.2	14.6	15.4	14.9	15.7	16.0
4H 2H	13.0	13.9	13.3	14.2	14.4	14.5	15.5	14.8	15.7	15.9
3H	12.9	13.7	13.2	14.0	14.3	14.5	15.3	14.8	15.6	15.8
4H	12.8	13.6	13.2	13.9	14.2	14.5	15.2	14.8	15.5	15.8
6H	12.8	13.4	13.1	13.8	14.1	14.5	15.1	14.9	15.5	15.8
8H	12.7	13.3	13.1	13.7	14.1	14.5	15.1	14.9	15.4	15.8
12H	12.7	13.2	13.1	13.6	14.0	14.5	15.1	14.9	15.4	15.8
8H 4H	12.7	13.3	13.1	13.7	14.1	14.3	14.9	14.7	15.3	15.7
6H	12.7	13.2	13.1	13.6	14.0	14.4	14.9	14.8	15.3	15.7
8H	12.7	13.1	13.1	13.5	14.0	14.4	14.9	14.9	15.3	15.7
12H	12.6	13.0	13.1	13.5	13.9	14.5	14.9	14.9	15.3	15.8
12H 4H	12.7	13.2	13.1	13.6	14.0	14.3	14.9	14.7	15.2	15.6
6H	12.7	13.1	13.1	13.5	14.0	14.4	14.8	14.8	15.2	15.6
8H	12.7	13.0	13.1	13.5	13.9	14.4	14.8	14.9	15.2	15.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.5 / - 6.9					+ 2.5 / - 5.3				
1.5H	+ 4.2 / - 6.4					+ 4.0 / - 5.7				
2.0H	+ 5.1 / - 3.9					+ 5.5 / - 4.3				

CIE Pub.117, 3227 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.1)
Area: 0.144 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

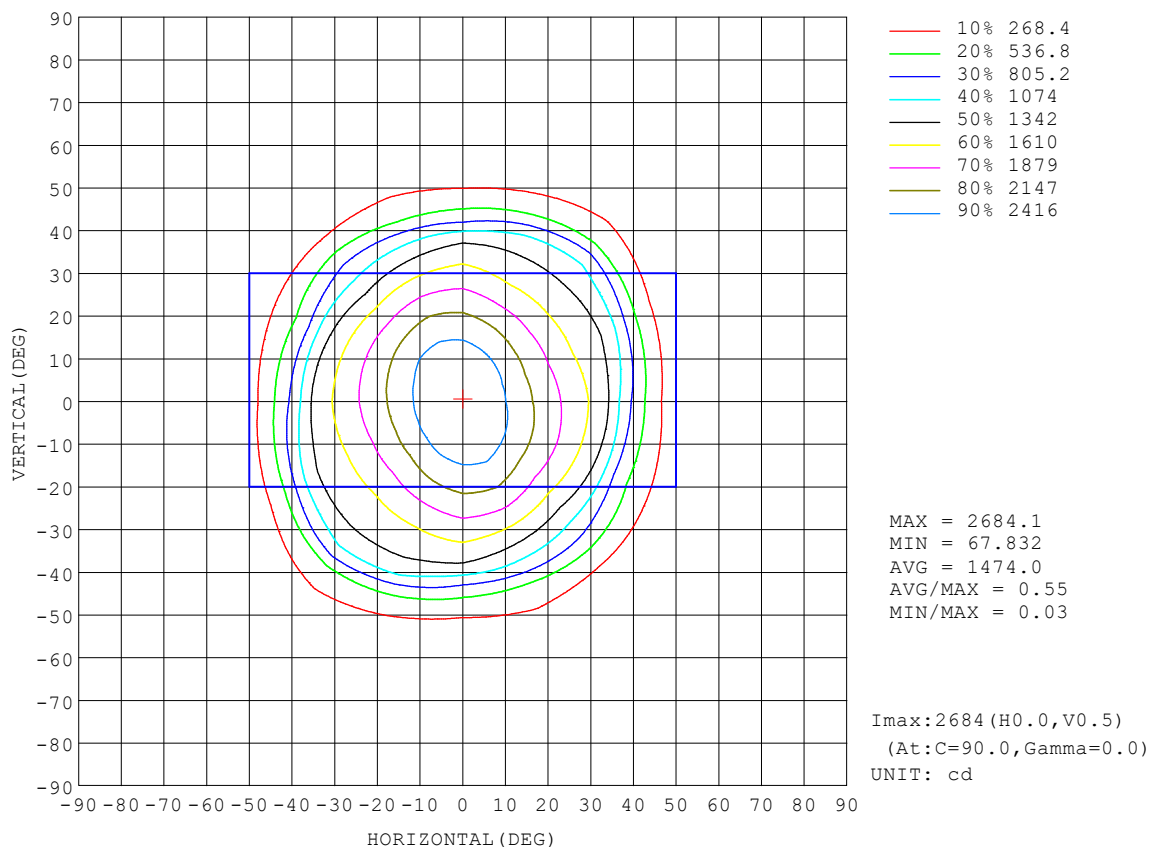
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	79	71	66	78	71	66	77	70	66	62
0.80	88	80	76	87	80	75	86	79	75	71
1.00	94	87	82	93	86	82	91	87	82	77
1.25	99	92	88	98	92	88	96	91	87	82
1.50	102	96	92	101	96	92	98	94	91	86
2.00	106	101	97	104	100	96	102	98	95	89
2.50	108	103	100	106	102	99	103	100	97	91
3.00	110	106	103	108	104	101	105	102	99	93
4.00	112	109	106	110	107	105	106	104	102	95
5.00	114	111	108	111	109	107	107	105	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: 25.3 °C
Operators: DAMIN
Test Date: 2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

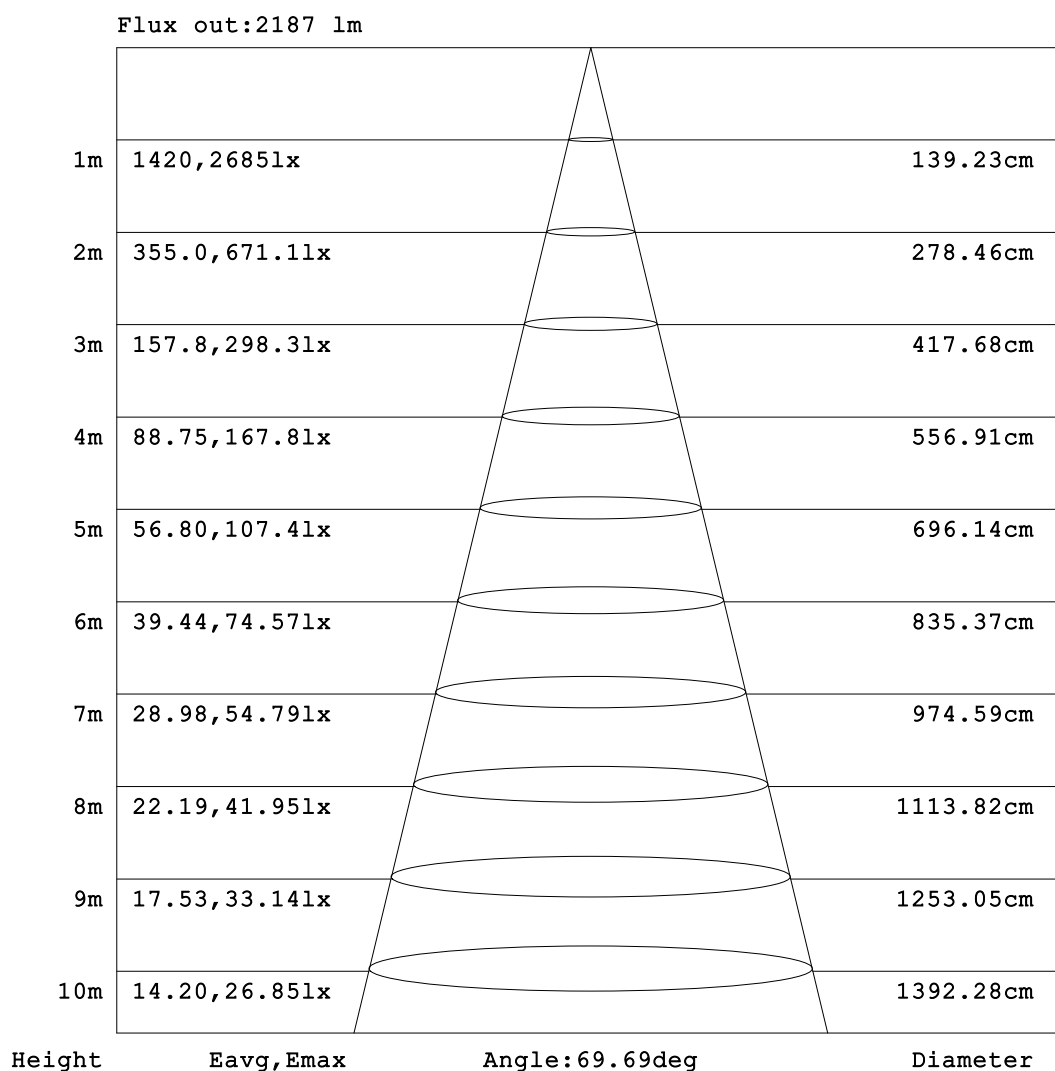


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:



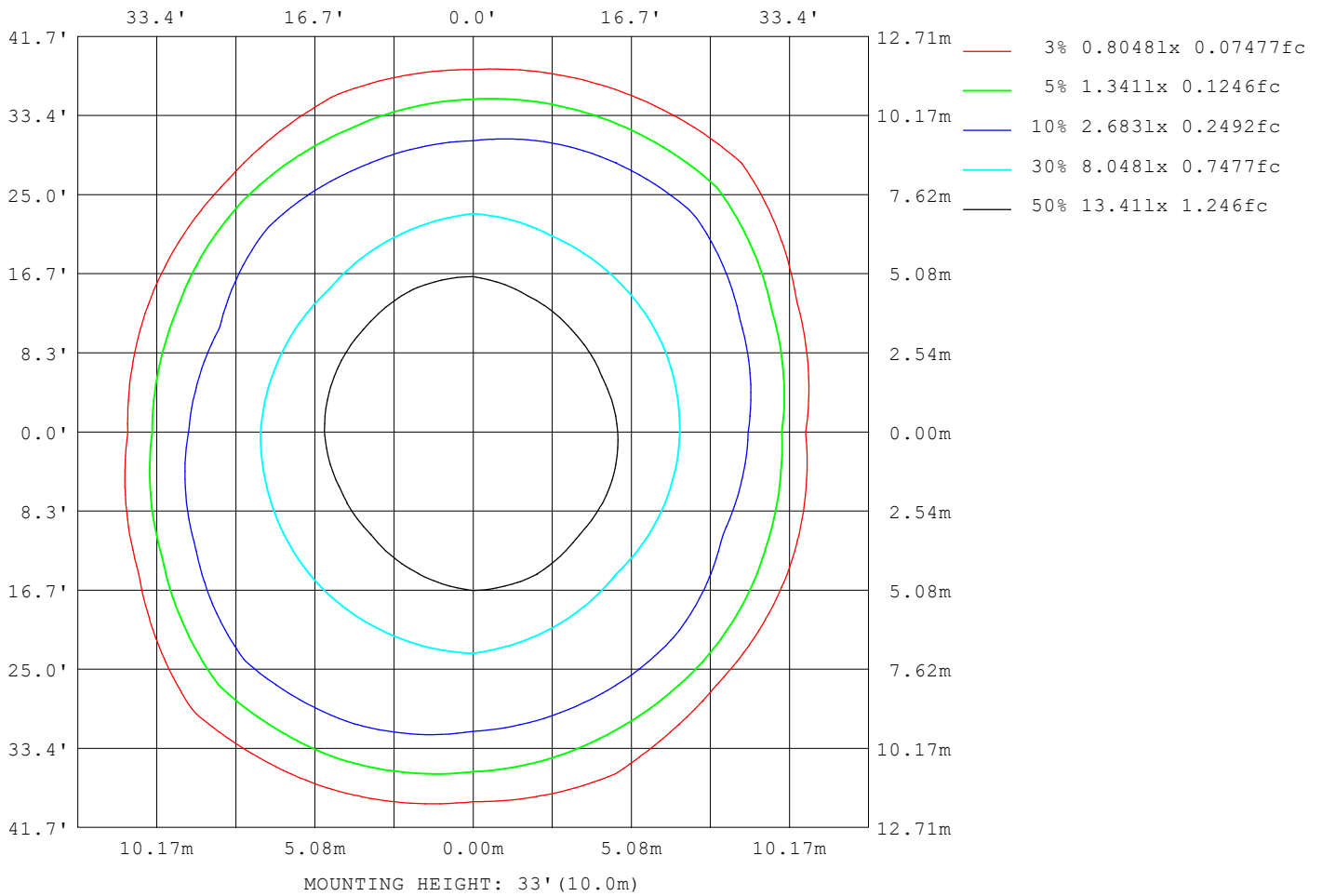
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2023-04-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:9.640m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.71V I:0.1257A P:26.851W PF:0.9259 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3226.85x1 lm		
NAME: LED541 B34V2 (29W 4000K)	TYPE: 29W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

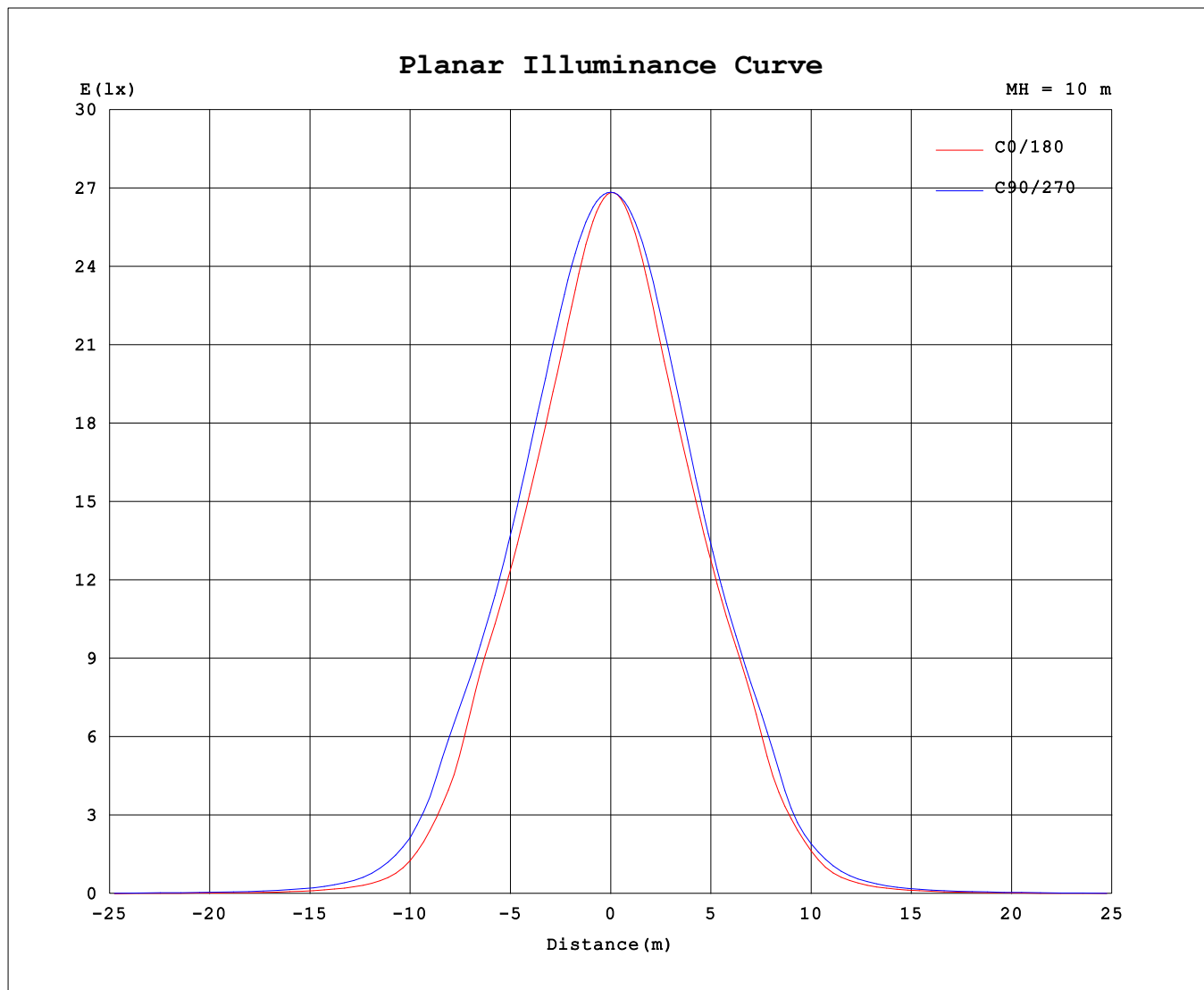
AvgL	cd/m2
L_0~180 (65) av	431
L_0~180 (75) av	291
L_0~180 (85) av	280
L_90~270 (65) av	838
L_90~270 (75) av	686
L_90~270 (85) av	800
L_45 (65) av	912
L_45 (75) av	446
L_45 (85) av	498

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2023-04-11

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 9.640m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:9.640m [K=1.0000]
Remarks:

```