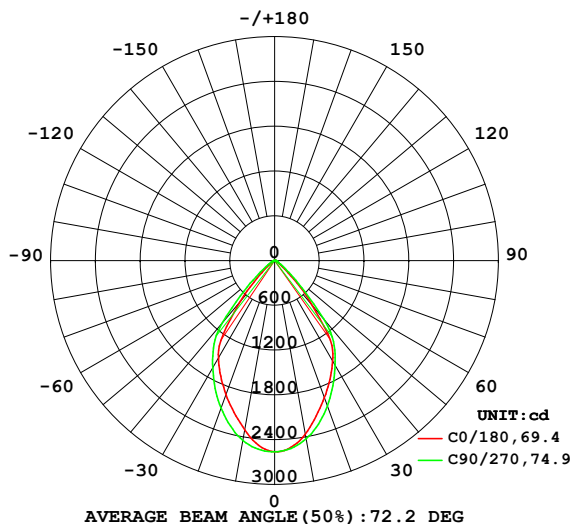


LUMINAIRE PHOTOMETRIC TEST REPORT

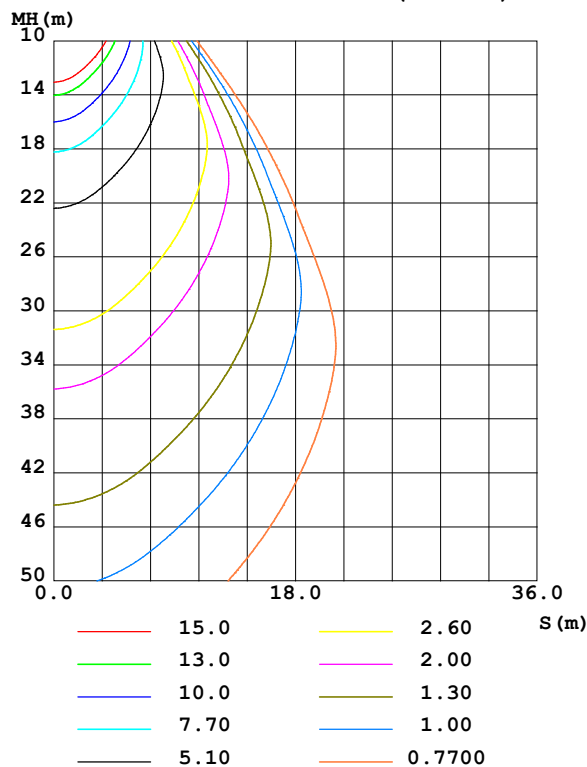
Test:U:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.46 lm/W			
MODEL	LED541 B34V2	I _{max} (cd)	2562	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)	3072.6	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	3072.64	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
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℃
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	2306	2347	2449	2432	2364	2371	2427	2398	0- 10	235.9	235.9	7.68,7.68
20	1910	1901	2104	2054	1955	1926	2071	2003	10- 20	617.1	853.0	27.8,27.8
30	1509	1485	1661	1524	1558	1504	1623	1459	20- 30	812.4	1665	54.2,54.2
40	715.9	1150	1104	892.6	791.5	1153	1027	811.8	30- 40	795.0	2460	80.1,80.1
50	143.2	352.7	284.3	192.7	180.9	367.2	251.9	131.0	40- 50	426.9	2887	94,94
60	39.52	120.2	78.80	43.17	44.77	123.0	78.50	40.54	50- 60	117.2	3005	97.8,97.8
70	13.99	33.15	33.42	22.25	16.33	35.66	32.45	20.07	60- 70	43.80	3048	99.2,99.2
80	5.593	11.10	17.00	9.194	6.986	12.69	16.04	7.887	70- 80	17.55	3066	99.8,99.8
90	0.9726	3.600	3.274	2.295	1.367	3.597	0.2639	0.9726	80- 90	6.769	3073	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): 2736.1 lm

%lum = 89.0%

%lamp = 89.0%

Conical surface Flux(130deg): 3031.5 lm

%lum = 98.7%

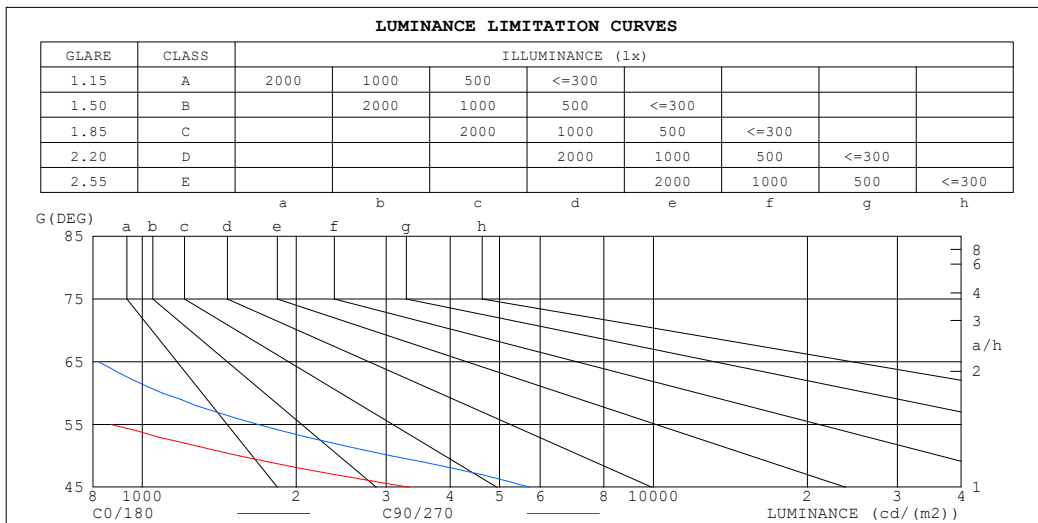
%lamp = 98.7%

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:

LUMINANCE LIMITATION CURVES

Test:U:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	221	808
80	224	680
75	249	656
70	284	679
65	370	821
60	549	1094
55	868	1684
50	1547	3071
45	3323	5726

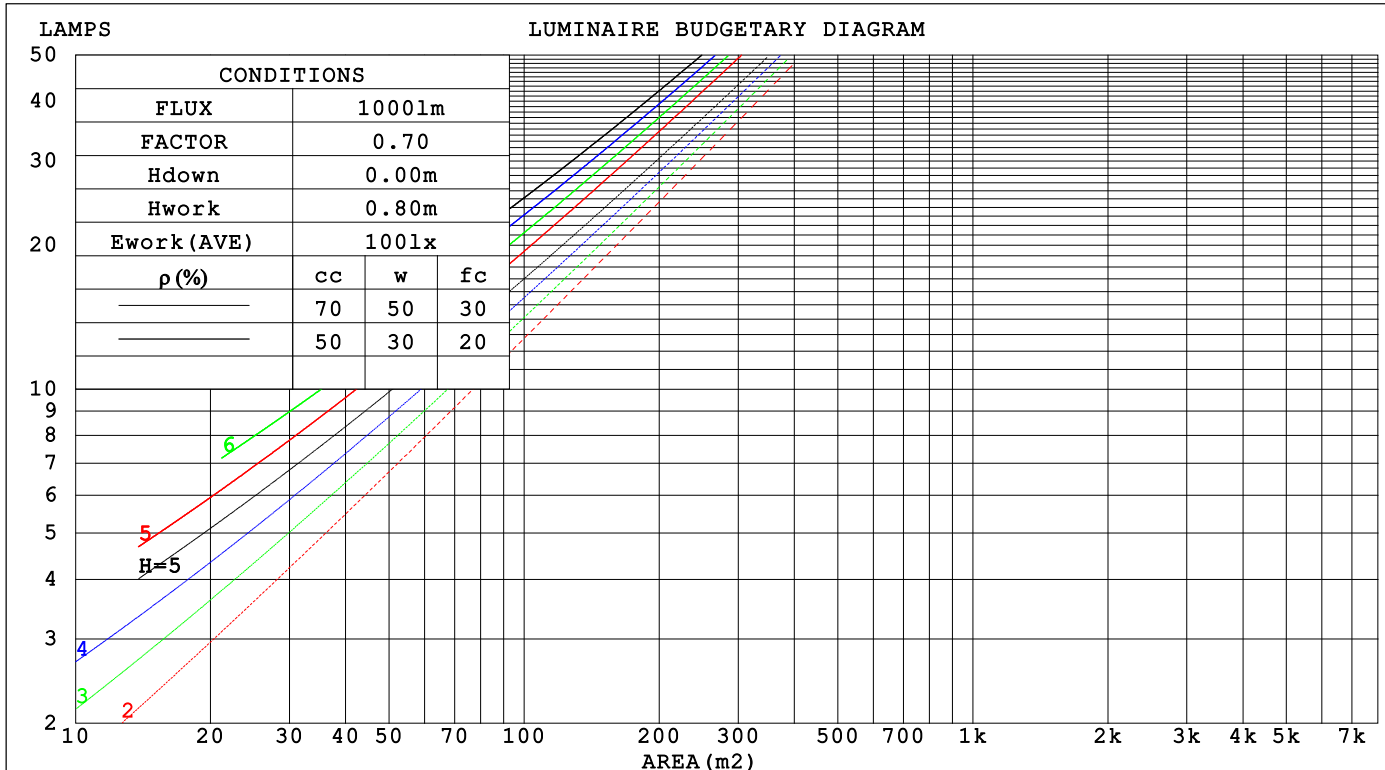
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2023-04-11

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:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz			UTHDi:0.00% ITHDi:0.00% KDisp:0			Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)			TYPE: 29W			WEIGHT:		
SPEC.: 3000K			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:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz			UTHDi:0.00% ITHDi:0.00% KDisp:0			Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)			TYPE: 29W			WEIGHT:		
SPEC.: 3000K			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	.036	.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	.097	.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	.158	.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	.148	.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:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm										
NAME: LED541 B34V2 (29W 3000K)					TYPE: 29W			WEIGHT:		
SPEC.: 3000K					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	14.5	15.6	14.7	15.7	15.9	16.0	17.1	16.2	17.2	17.4
3H	14.3	15.3	14.6	15.5	15.7	15.9	16.9	16.1	17.1	17.3
4H	14.2	15.2	14.5	15.4	15.6	15.8	16.8	16.1	17.0	17.2
6H	14.2	15.0	14.5	15.3	15.5	15.8	16.7	16.1	16.9	17.2
8H	14.1	15.0	14.4	15.2	15.5	15.8	16.6	16.1	16.9	17.1
12H	14.1	14.9	14.4	15.2	15.4	15.7	16.6	16.1	16.8	17.1
4H 2H	14.4	15.3	14.7	15.6	15.8	15.8	16.8	16.1	17.0	17.2
3H	14.3	15.1	14.6	15.3	15.6	15.7	16.6	16.1	16.8	17.1
4H	14.2	14.9	14.5	15.2	15.5	15.7	16.5	16.1	16.8	17.1
6H	14.1	14.8	14.5	15.1	15.4	15.7	16.4	16.1	16.7	17.0
8H	14.1	14.7	14.5	15.0	15.4	15.7	16.3	16.1	16.7	17.0
12H	14.0	14.6	14.4	15.0	15.3	15.7	16.2	16.1	16.6	17.0
8H 4H	14.1	14.7	14.5	15.0	15.4	15.6	16.2	16.0	16.6	16.9
6H	14.0	14.5	14.4	14.9	15.3	15.6	16.1	16.0	16.5	16.9
8H	14.0	14.4	14.4	14.8	15.3	15.6	16.1	16.1	16.5	16.9
12H	14.0	14.3	14.4	14.8	15.2	15.6	16.0	16.1	16.5	16.9
12H 4H	14.0	14.6	14.5	15.0	15.4	15.6	16.1	16.0	16.5	16.9
6H	14.0	14.4	14.4	14.8	15.3	15.6	16.0	16.0	16.4	16.9
8H	14.0	14.3	14.4	14.8	15.2	15.6	16.0	16.1	16.4	16.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.7 / - 6.9					+ 2.5 / - 5.3				
1.5H	+ 3.5 / - 5.9					+ 2.8 / - 4.1				
2.0H	+ 4.1 / - 5.3					+ 4.6 / - 4.3				

CIE Pub.117, 3073 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.9)
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:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

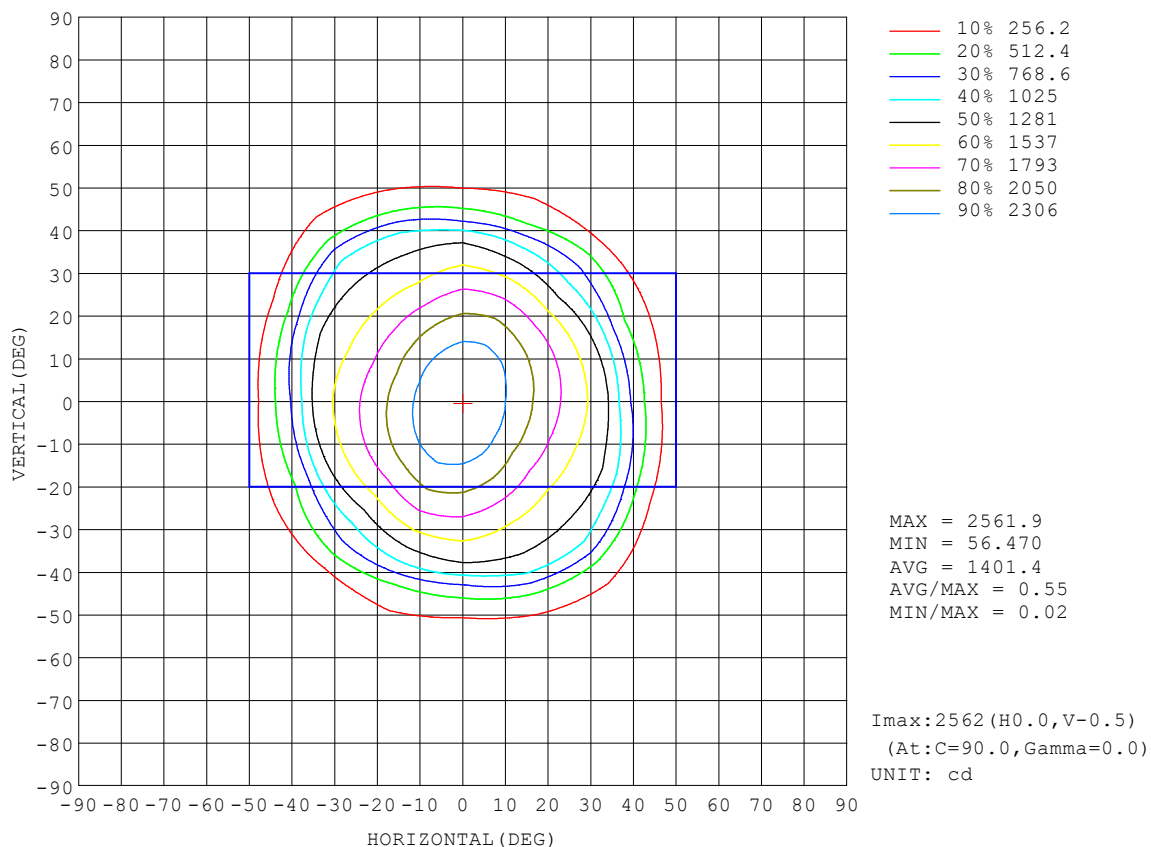
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	79	71	66	78	71	66	77	70	66	62
0.80	88	80	76	87	80	75	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:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

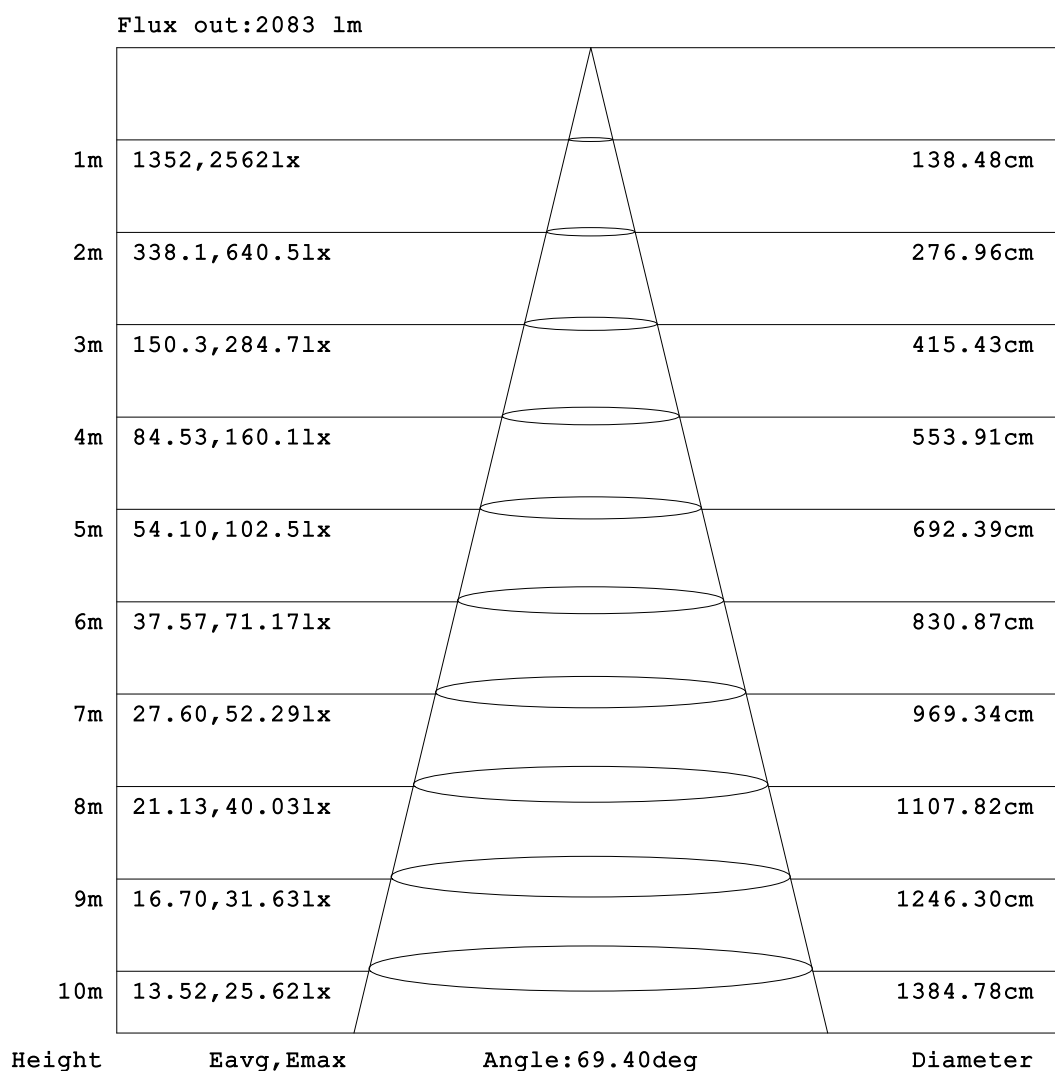


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2023-04-11

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:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:



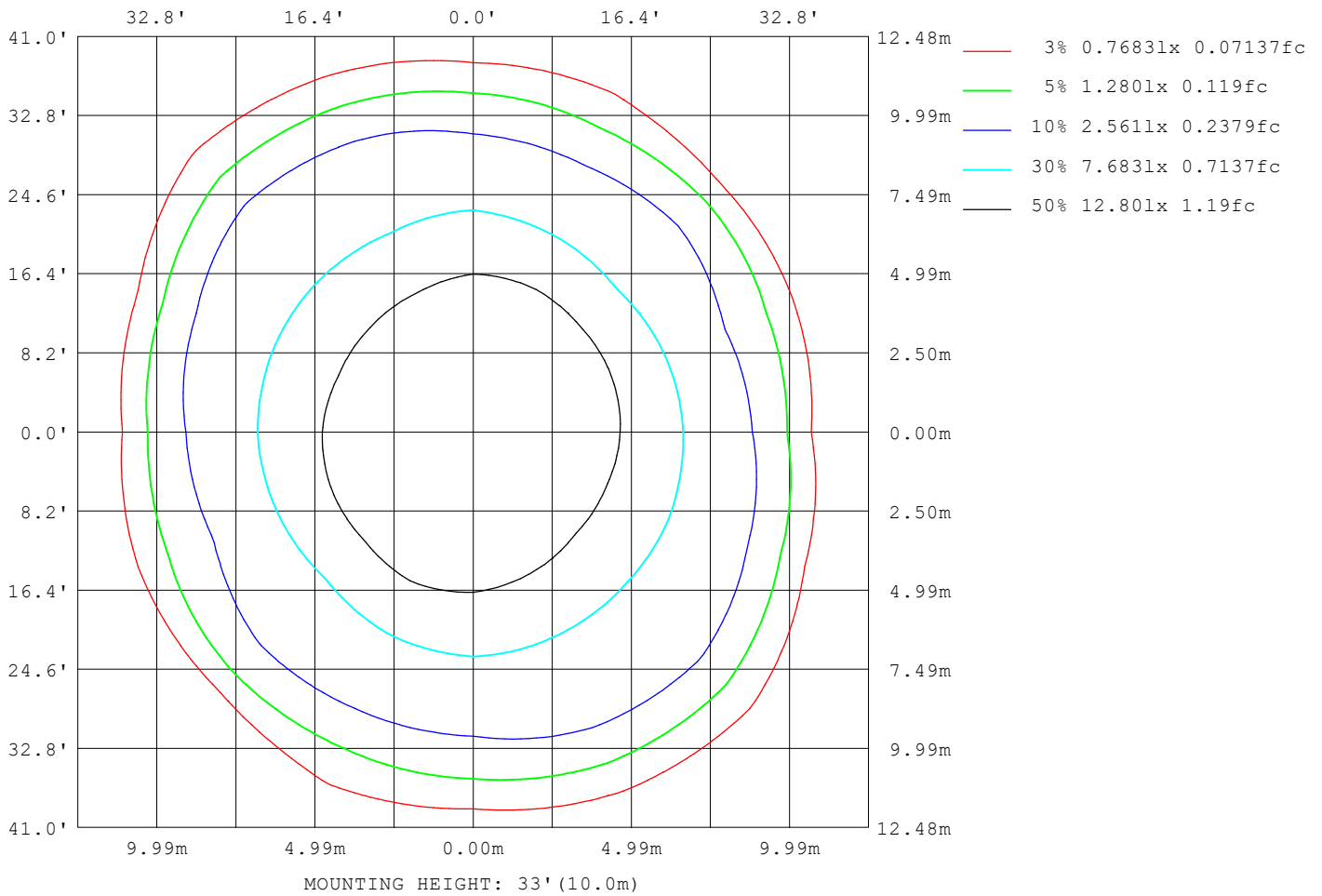
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°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:

ISOLUX DIAGRAM

Test:U:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	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°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:

LED Avg.L Report

Test:U:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

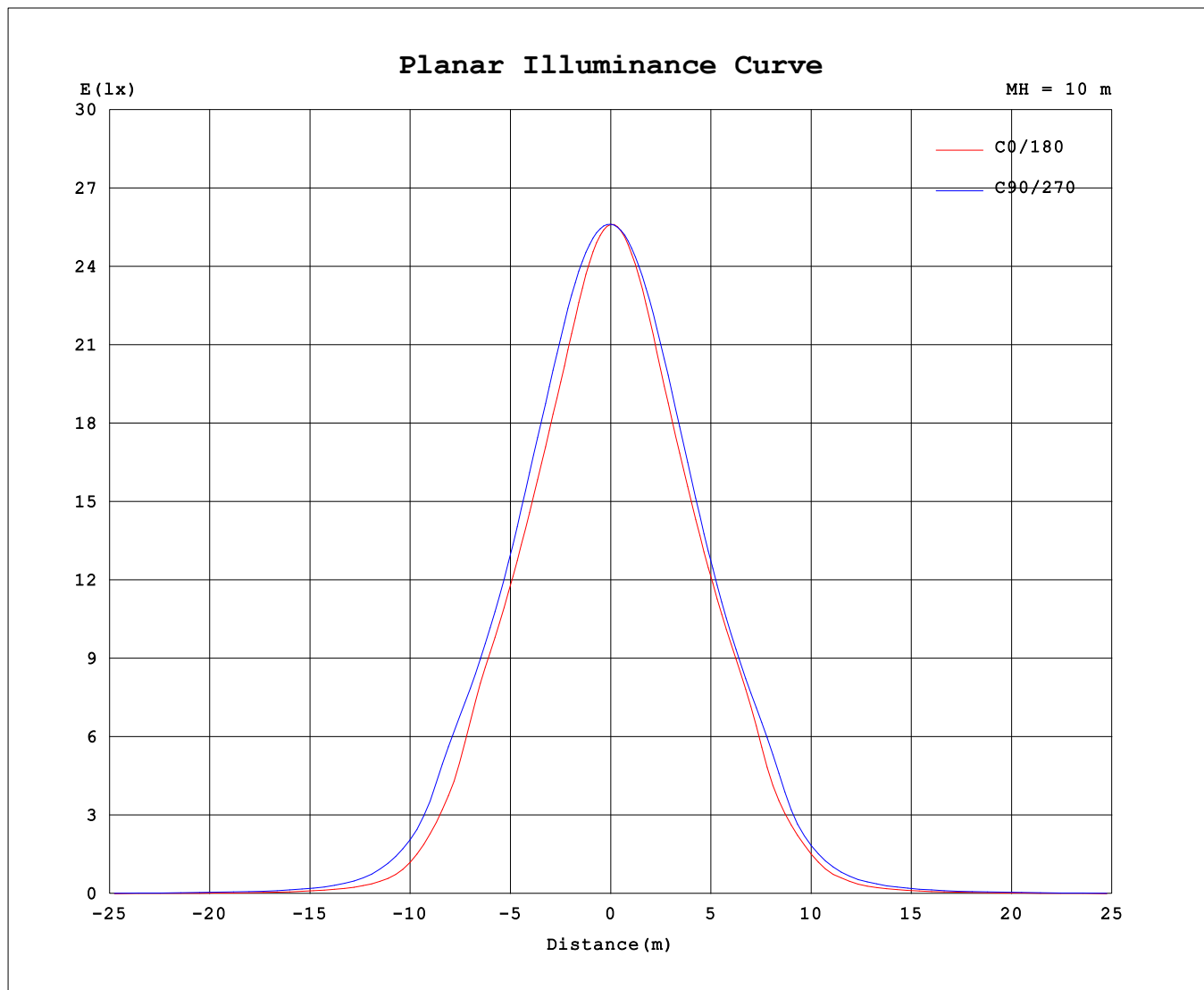
AvgL	cd/m2
L_0~180 (65) av	402
L_0~180 (75) av	273
L_0~180 (85) av	260
L_90~270 (65) av	809
L_90~270 (75) av	649
L_90~270 (85) av	761
L_45 (65) av	852
L_45 (75) av	416
L_45 (85) av	473

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:

Test: U:230.68V I:0.1255A P:26.845W PF:0.9270 Freq:49.99Hz UTHDi: 0.00% ITHDi: 0.00% KDisp: 0 Lamp Flux: 3072.64x1 lm		
NAME: LED541 B34V2 (29W 3000K)	TYPE: 29W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 1.2*0.12	Shielding Angle:

UNIT: cd

[illegible]

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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:

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