

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	4775	4789	4754	4724	4729	4747	4717	4716	0- 10	467.0	467.0	11.5,11.5
20	4081	4010	3937	3900	3888	3938	3993	4024	10- 20	1237	1704	42.1,42.1
30	2111	2041	1952	1963	1879	1902	2041	2106	20- 30	1421	3125	77.2,77.2
40	475.5	455.3	419.3	430.2	414.8	430.2	469.3	473.1	30- 40	620.0	3745	92.5,92.5
50	137.0	126.8	120.2	122.9	119.8	123.2	135.0	138.4	40- 50	194.0	3939	97.3,97.3
60	52.74	50.37	49.78	48.69	47.34	49.54	50.62	52.32	50- 60	71.64	4010	99.1,99.1
70	15.38	15.86	15.45	14.51	13.46	13.63	13.91	14.68	60- 70	29.30	4040	99.8,99.8
80	2.763	3.194	2.886	2.701	2.556	2.443	2.383	2.497	70- 80	7.336	4047	100,100
90	0.1422	0.2025	0.1488	0.1122	0.1197	0.1095	0.1189	0.1055	80- 90	1.098	4048	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): 3867.4 lm

%lum = 95.5%

%lamp = 95.5%

Conical surface Flux(120deg): 4010.5 lm

%lum = 99.1%

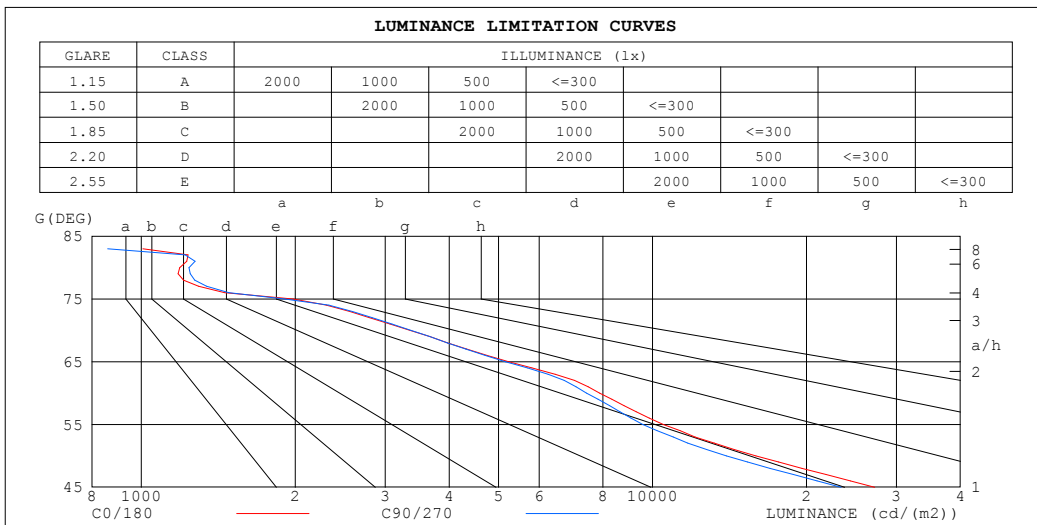
%lamp = 99.1%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2024-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
 Humidity:65.0%  
 Test Distance:3.090m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm		
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 131mm	Shielding Angle:



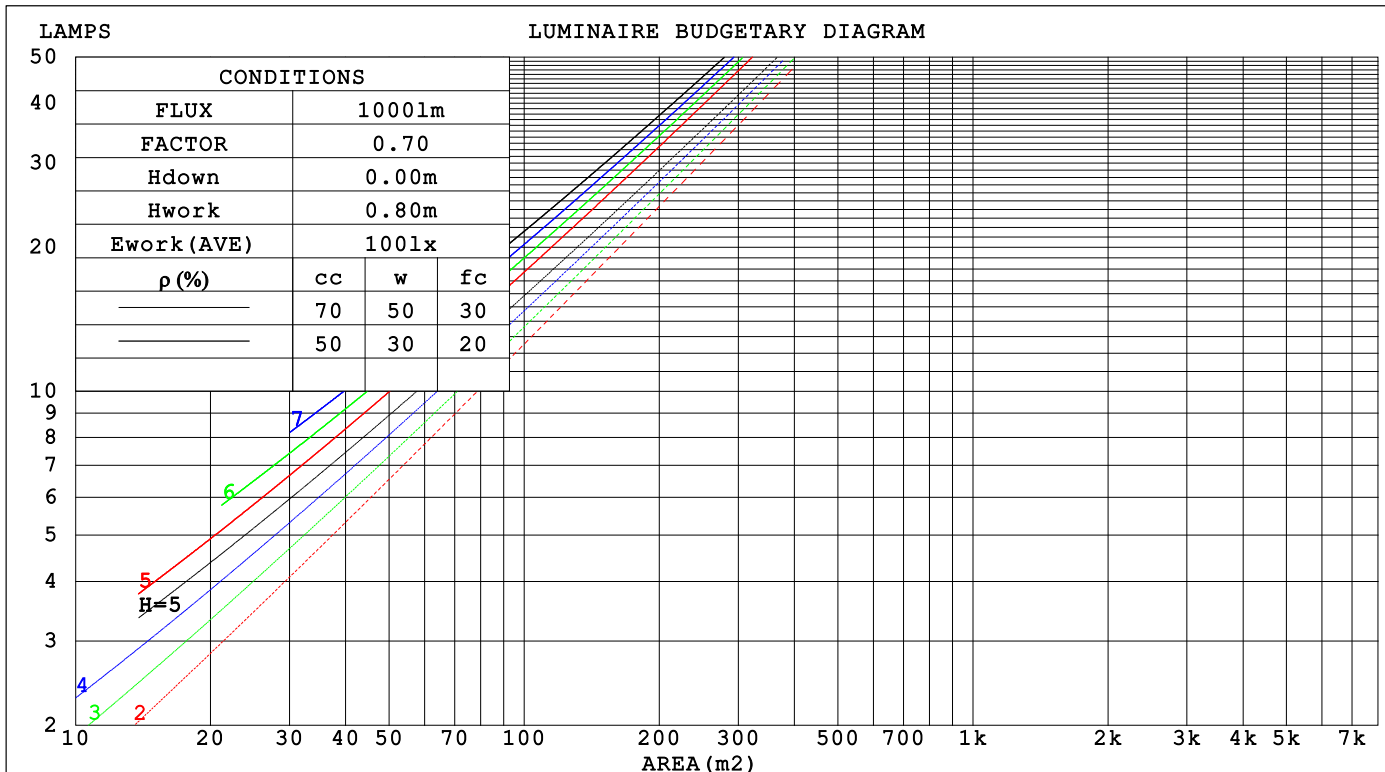
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity: 65.0%  
Test Distance: 3.090m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm		
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
DIM.:		
SUR.: 131mm		

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: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

### WEC AND CCEC

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm		
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 131mm		

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	.175	.100	.032	.169	.096	.031	.156	.089	.029	.144	.083	.027	.134	.078	.025		
2.0	.168	.092	.028	.162	.089	.027	.151	.084	.026	.142	.079	.025	.133	.075	.024		
3.0	.159	.085	.025	.155	.083	.025	.146	.079	.024	.137	.075	.023	.129	.072	.022		
4.0	.152	.079	.023	.147	.077	.023	.140	.074	.022	.132	.071	.021	.126	.068	.021		
5.0	.144	.074	.021	.141	.072	.021	.134	.070	.021	.128	.067	.020	.122	.065	.020		
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018		
7.0	.132	.065	.018	.129	.064	.018	.124	.062	.018	.119	.061	.018	.114	.059	.017		
8.0	.126	.062	.017	.123	.061	.017	.119	.059	.017	.114	.058	.017	.110	.057	.016		
9.0	.121	.058	.016	.118	.058	.016	.114	.056	.016	.110	.055	.016	.107	.054	.016		
10.0	.116	.055	.015	.114	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015		

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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016		
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013		
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011		
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.045	.045	.035	.026	.015	.011	.009		
5.0	.124	.087	.060	.107	.075	.052	.073	.053	.037	.043	.031	.022	.014	.010	.007		
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006		
7.0	.110	.070	.042	.095	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005		
8.0	.104	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004		
9.0	.099	.059	.032	.085	.051	.027	.059	.036	.020	.034	.021	.012	.011	.007	.004		
10.0	.095	.054	.028	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003		

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm										
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:						WEIGHT:				
SPEC.:						DIM.:		SERIAL No.:		
MFR.: Norming lighting						SUR.: 131mm		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	19.0	19.9	19.2	20.1	20.3	18.6	19.5	18.8	19.7	19.8
3H	18.9	19.8	19.2	20.0	20.2	18.5	19.3	18.8	19.5	19.7
4H	18.8	19.6	19.1	19.9	20.1	18.4	19.2	18.7	19.5	19.7
6H	18.8	19.5	19.1	19.8	20.0	18.3	19.1	18.6	19.3	19.6
8H	18.7	19.4	19.0	19.7	20.0	18.3	19.0	18.6	19.3	19.5
12H	18.7	19.4	19.0	19.6	19.9	18.3	19.0	18.6	19.2	19.5
4H 2H	18.8	19.6	19.1	19.9	20.1	18.4	19.2	18.7	19.4	19.7
3H	18.8	19.5	19.1	19.7	20.0	18.4	19.1	18.7	19.3	19.6
4H	18.7	19.3	19.0	19.6	19.9	18.3	18.9	18.6	19.2	19.5
6H	18.6	19.2	19.0	19.5	19.8	18.2	18.8	18.6	19.1	19.4
8H	18.6	19.1	18.9	19.4	19.8	18.2	18.7	18.6	19.0	19.4
12H	18.5	19.0	18.9	19.3	19.7	18.1	18.6	18.5	19.0	19.3
8H 4H	18.6	19.1	18.9	19.4	19.8	18.2	18.7	18.6	19.0	19.4
6H	18.5	18.9	18.9	19.3	19.7	18.1	18.5	18.5	18.9	19.3
8H	18.4	18.8	18.9	19.2	19.6	18.0	18.4	18.5	18.8	19.3
12H	18.4	18.7	18.8	19.1	19.6	18.0	18.3	18.4	18.7	19.2
12H 4H	18.5	19.0	18.9	19.3	19.7	18.1	18.6	18.5	19.0	19.3
6H	18.4	18.8	18.9	19.2	19.6	18.0	18.4	18.5	18.8	19.3
8H	18.4	18.7	18.8	19.1	19.6	18.0	18.3	18.4	18.7	19.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.7 / - 5.0					+ 2.5 / - 4.9				
1.5H	+ 4.3 / - 4.2					+ 4.1 / - 3.9				
2.0H	+ 4.4 / - 3.3					+ 3.8 / - 2.9				

CIE Pub.117, 4048 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.9)  
Area: 0.0134 m2

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm		
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D TYPE:		WEIGHT:
SPEC.:		SERIAL No.:
MFR.: Norming lighting		Shielding Angle:
SUR.: 131mm		

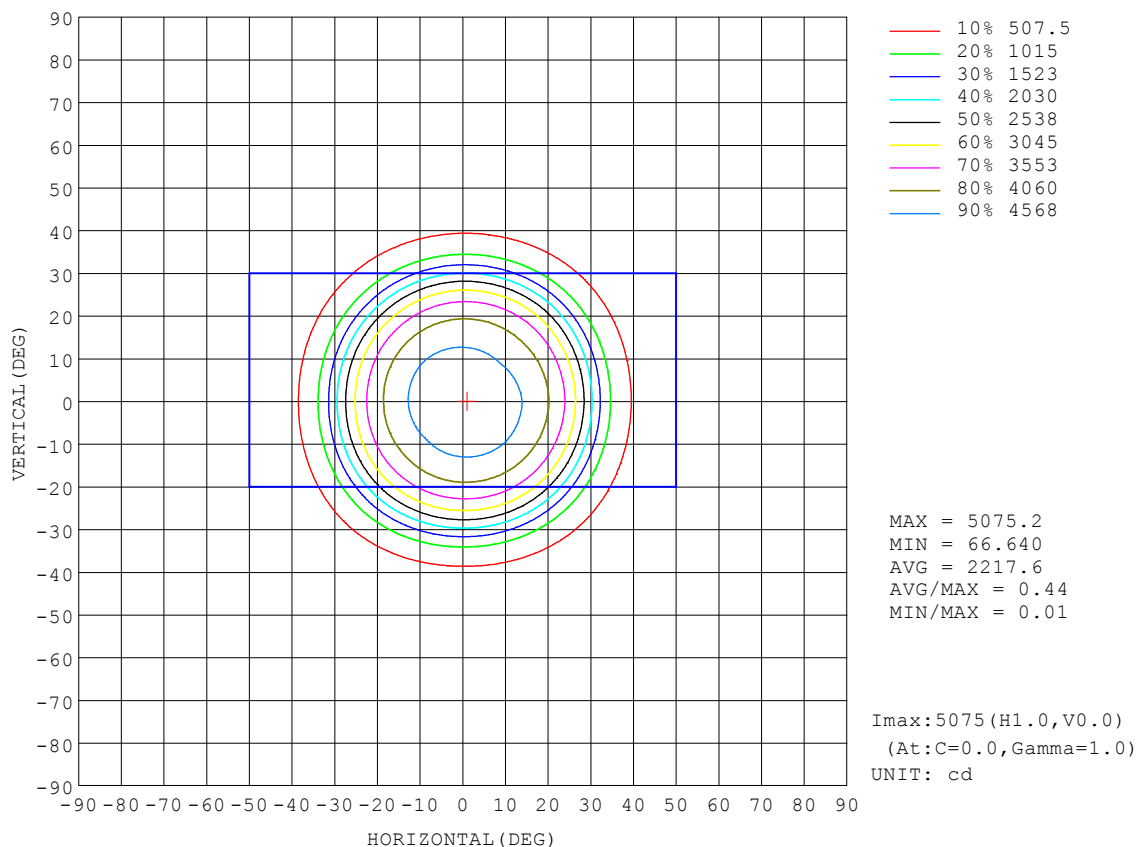
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	77	86	80	76	86	80	76	73
0.80	94	88	85	94	88	85	92	87	84	80
1.00	99	93	90	98	93	89	96	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	104	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	107	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2024-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity: 65.0%  
Test Distance: 3.090m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm		
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 131mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

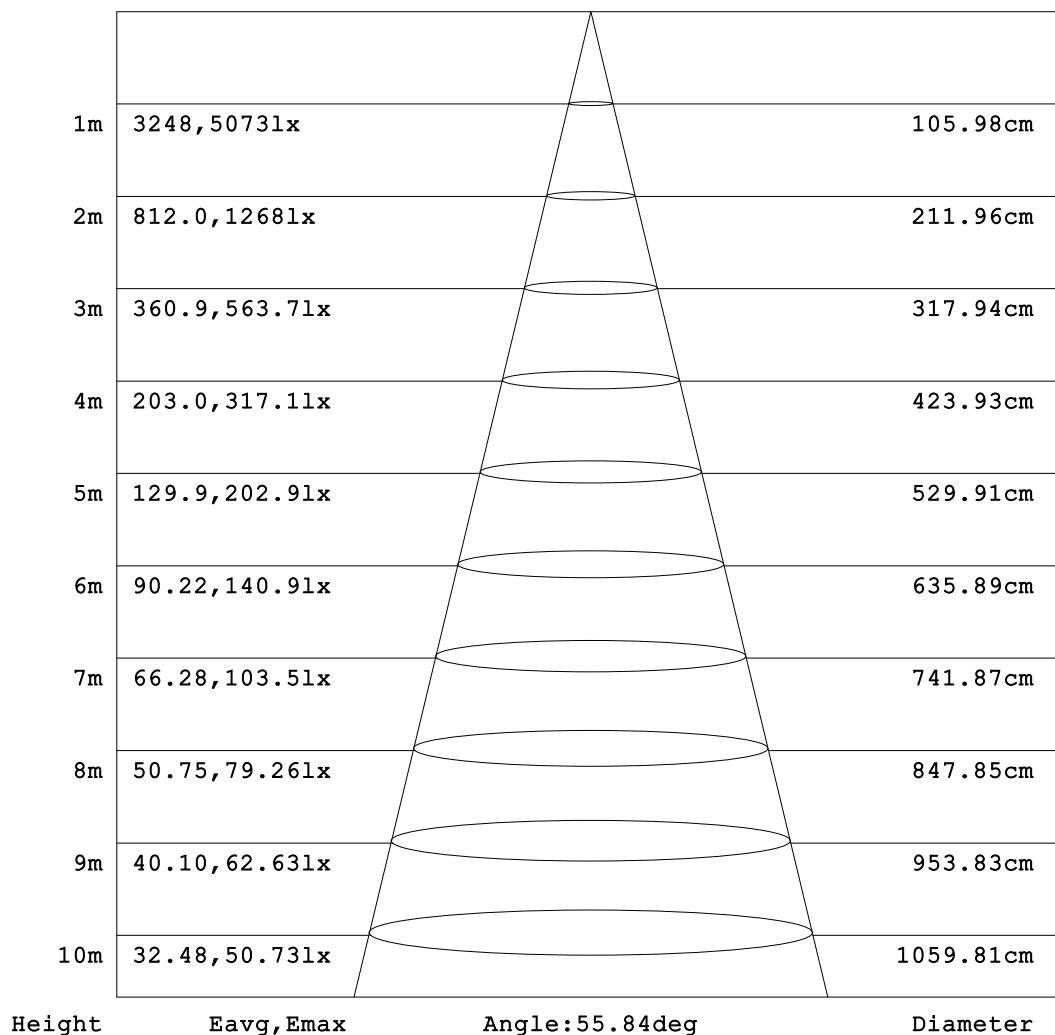
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892		Lamp Flux:4048.2x1 lm
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 131mm	Shielding Angle:

Flux out:2885 lm



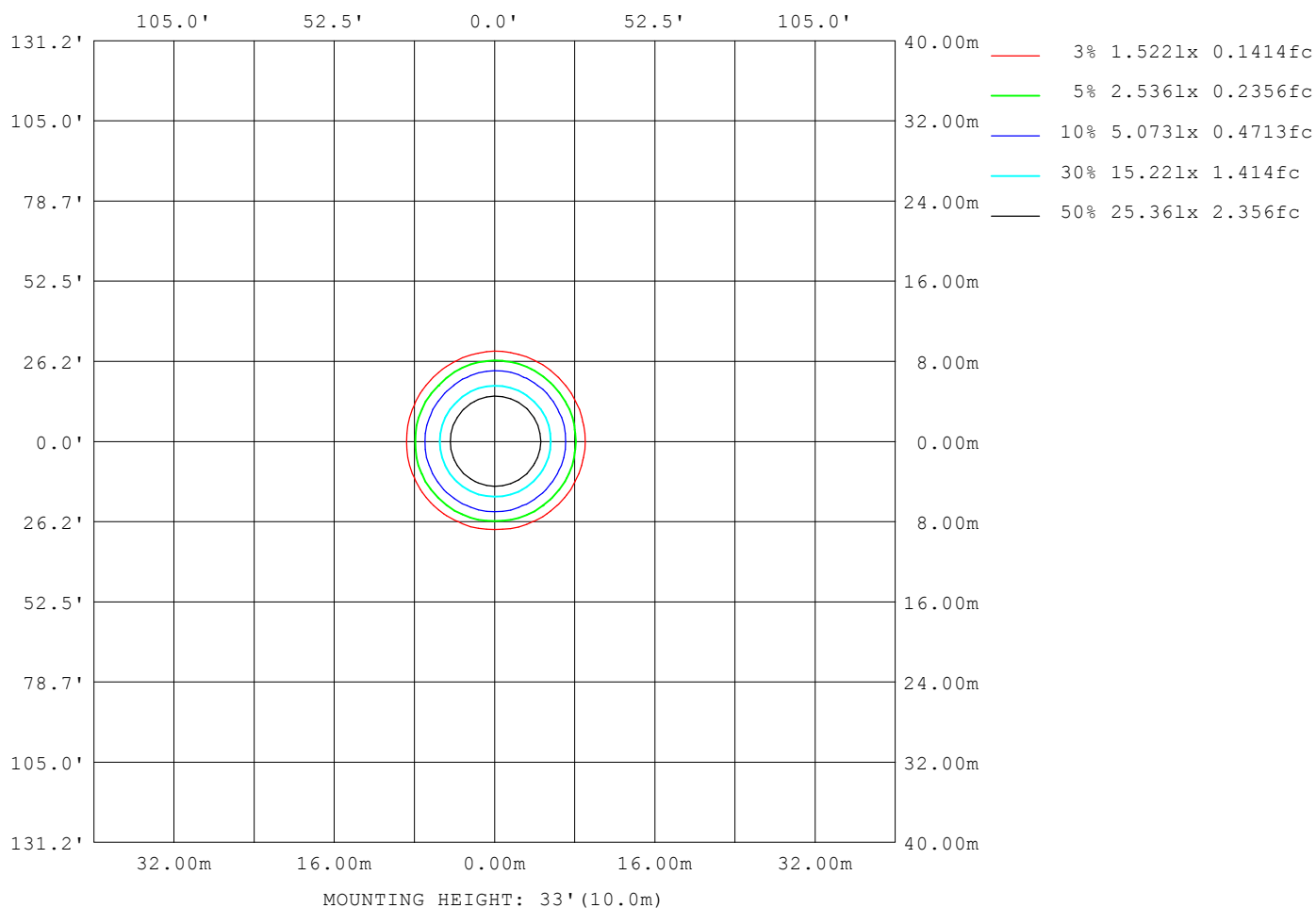
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity: 65.0%  
Test Distance: 3.090m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892		Lamp Flux:4048.2x1 lm
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 131mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:240.4V I:0.1672A P:39.7W PF:0.9882 Freq:49.99Hz		
UTHDi:0.16% ITHDi:4.27% KDisp:0.9892 Lamp Flux:4048.2x1 lm		
NAME: FUSION GT-TR03-AHD-045-COB-01SC 2700K RA90 60D 40WPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming lighting	SUR.: 131mm	Shielding Angle:

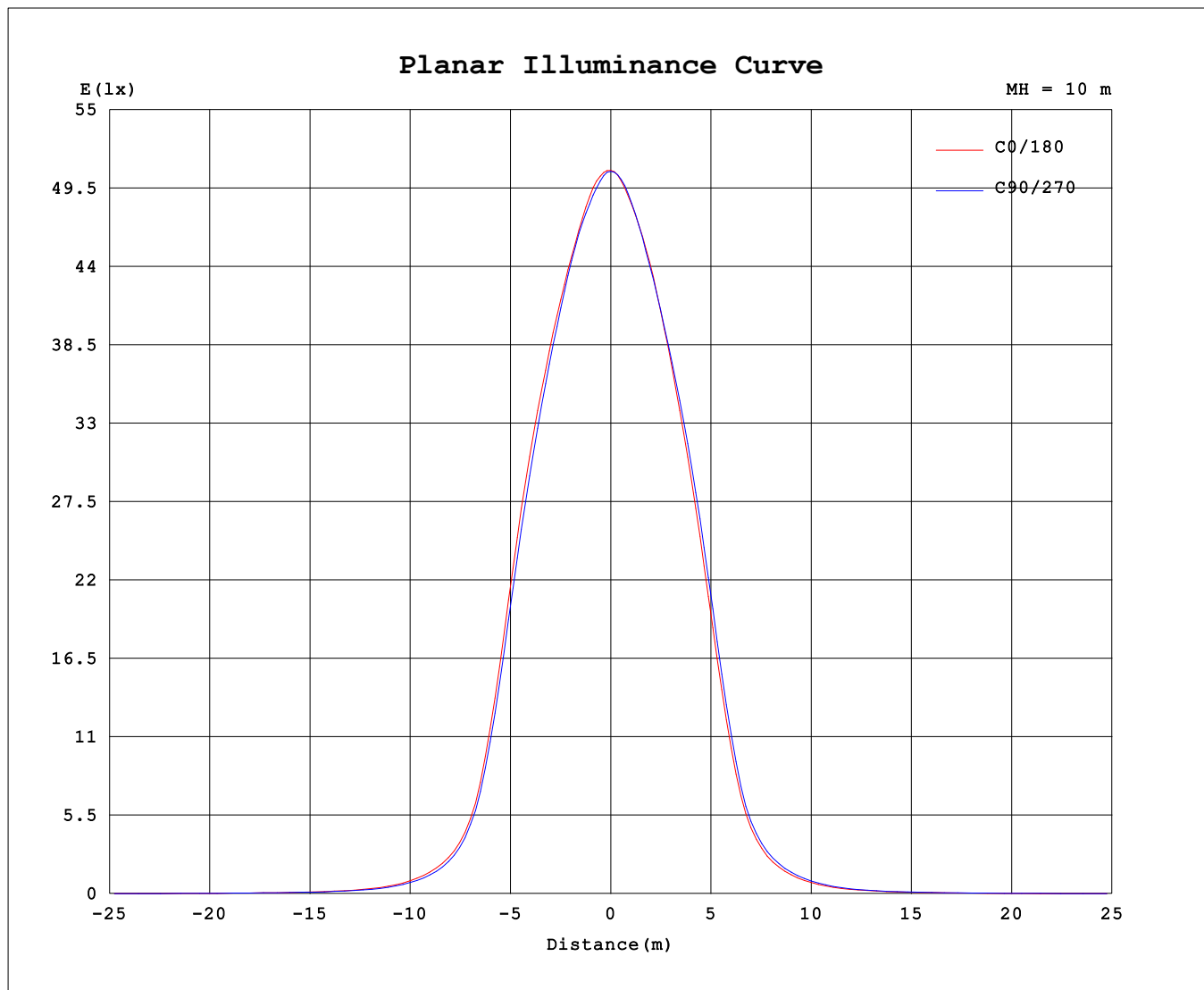
AvgL	cd/m2
L_0~180 (65) av	4862
L_0~180 (75) av	1692
L_0~180 (85) av	562
L_90~270 (65) av	4945
L_90~270 (75) av	1698
L_90~270 (85) av	566
L_45 (65) av	4928
L_45 (75) av	1712
L_45 (85) av	635

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2024-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
 Humidity: 65.0%  
 Test Distance: 3.090m [K=1.0000]  
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```

### Photometric Data Table [cd]

G/C	0.0	45.0	90.0	135.0	180.0	225.0	270.0	315.0
0.0	5068	5068	5068	5068	5068	5068	5068	5068
3.0	5049	5043	5022	5008	5017	5029	5034	5041
6.0	4967	4962	4921	4908	4911	4922	4924	4929
9.0	4826	4831	4807	4783	4779	4798	4777	4771
12.0	4673	4681	4636	4592	4617	4633	4605	4598
15.0	4497	4478	4418	4382	4392	4416	4412	4419
18.0	4267	4211	4158	4116	4117	4157	4185	4200
21.0	3968	3895	3812	3776	3760	3811	3881	3919
24.0	3542	3447	3355	3324	3287	3331	3449	3512
27.0	2911	2810	2719	2700	2635	2678	2825	2897
30.0	2111	2041	1952	1963	1879	1902	2041	2106
33.0	1328	1281	1216	1246	1165	1179	1278	1339
36.0	812.0	784.0	742.3	763.1	721.1	729.0	796.9	815.6
39.0	538.3	515.8	479.8	493.0	472.0	485.7	531.3	535.2
42.0	373.4	354.5	324.0	331.2	323.0	336.8	368.0	373.6
45.0	257.5	241.3	221.7	228.8	223.0	230.5	252.8	258.7
48.0	175.5	162.6	152.2	155.9	152.3	156.7	172.9	176.9
51.0	121.7	112.6	107.6	109.8	107.0	110.0	120.1	123.1
54.0	89.09	82.49	80.40	80.90	78.87	81.98	86.94	89.98
57.0	67.77	63.86	63.04	62.46	60.69	63.69	66.03	67.91
60.0	52.74	50.37	49.78	48.69	47.34	49.54	50.62	52.32
63.0	39.19	38.56	38.01	35.59	33.31	34.46	35.39	37.84
66.0	25.82	26.14	25.64	24.07	22.47	22.97	23.41	24.75
69.0	17.57	18.03	17.60	16.56	15.40	15.65	15.97	16.84
72.0	11.54	12.04	11.71	10.94	10.05	10.21	10.29	10.92
75.0	6.869	7.255	6.621	5.615	4.866	4.790	5.158	6.087
78.0	3.366	3.669	3.545	3.336	3.106	2.949	2.933	3.096
81.0	2.570	3.142	2.670	2.457	2.285	2.197	2.200	2.309
84.0	0.9540	1.444	0.8808	0.7699	0.7349	0.7010	0.7793	0.8108
87.0	0.4316	0.5661	0.3742	0.2851	0.2619	0.2536	0.3288	0.3442
90.0	0.1422	0.2025	0.1488	0.1122	0.1197	0.1095	0.1189	0.1055

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks: