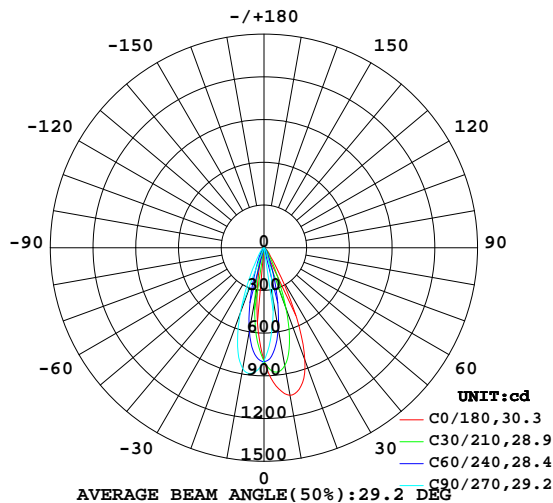


## LUMINAIRE PHOTOMETRIC TEST REPORT

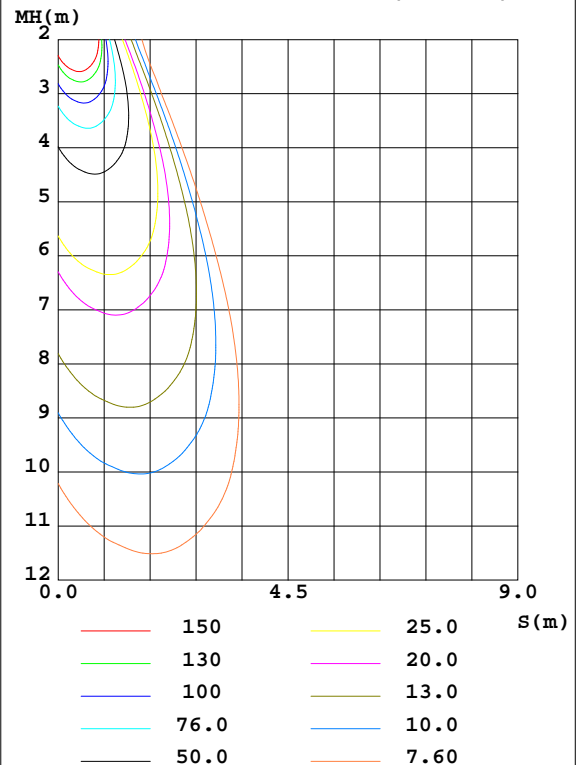
Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm					
NAME: 40002-6W-3000K		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:88		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 64.65 lm/W
MODEL	40002	I <sub>max</sub> (cd)	1118	S/MH(C0/180)	0.25	
NOMINAL POWER(W)	5	LOR(%)	100.0	S/MH(C90/270)	0.66	
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	376.40	η UP,DN(C0-180)	0.0,40.0	
NOMINAL FLUX(lm)	376.397	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,60.0	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE(V)	220.0	η down(%)	100.0	CIBSE SHR MAX	0.50	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:1  
 Test Date:2022-06-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
 Humidity:65.0%  
 Test Distance:3.106m [K=1.0000]  
 Remarks: 3197-60°

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

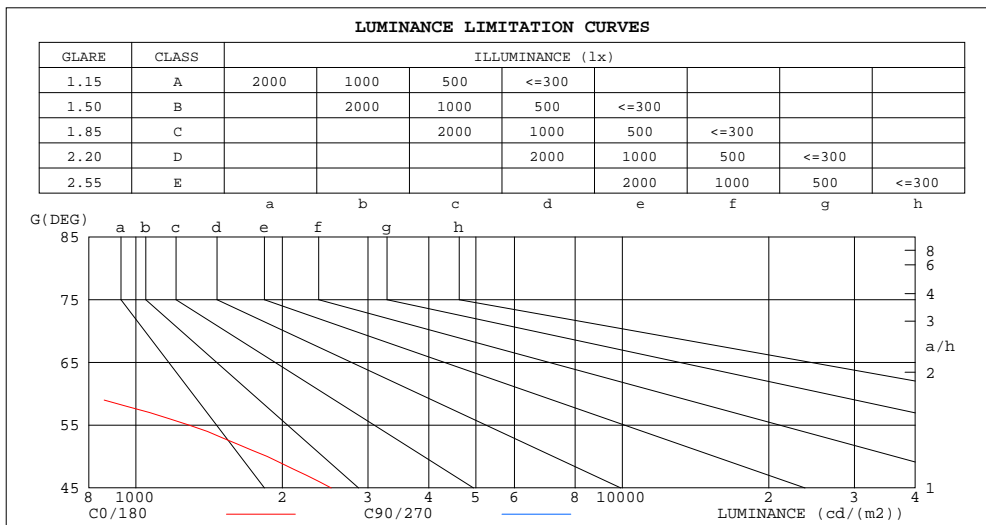
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	1052	709.2	366.0	242.9	264.3	482.4	862.3	1081	0- 10	67.26	67.26	17.9,17.9
20	838.2	319.2	92.28	61.20	62.89	135.3	487.4	931.5	10- 20	137.0	204.3	54.3,54.3
30	242.7	83.47	35.68	25.23	26.84	47.58	125.8	350.3	20- 30	105.5	309.7	82.3,82.3
40	62.69	35.09	13.93	6.819	8.786	20.97	45.15	72.56	30- 40	39.84	349.6	92.9,92.9
50	28.70	13.59	3.383	2.175	2.590	5.990	19.56	32.76	40- 50	16.97	366.5	97.4,97.4
60	9.106	3.295	0.2216	0	0	1.349	5.131	12.07	50- 60	7.296	373.8	99.3,99.3
70	2.283	0.5166	0	0	0	0	1.842	3.677	60- 70	2.064	375.9	99.9,99.9
80	0	0	0	0	0	0	0	0.0284	70- 80	0.5087	376.4	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0003	376.4	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: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°

### LUMINANCE LIMITATION CURVES

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	0	0
80	0	0
75	177	0
70	278	0
65	380	0
60	759	18
55	1285	141
50	1861	219
45	2519	398

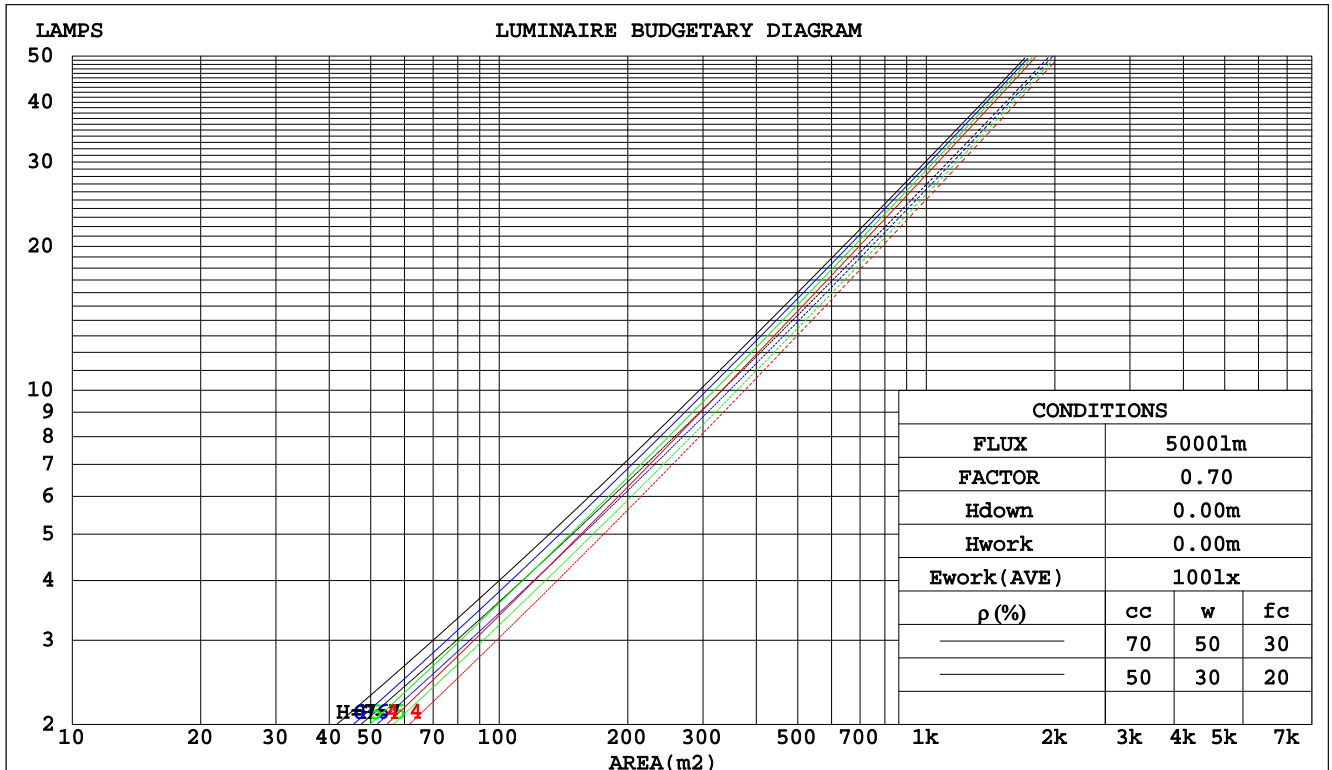
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:1  
 Test Date:2022-06-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
 Humidity:65.0%  
 Test Distance:3.106m [K=1.0000]  
 Remarks: 3197-60°

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	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															



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°

## WEC AND CCEC

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	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	.165	.094	.030	.158	.090	.029	.145	.083	.027	.134	.077	.025	.123	.071	.023	
2.0	.156	.086	.026	.151	.083	.026	.140	.078	.024	.131	.073	.023	.122	.069	.022	
3.0	.148	.079	.024	.143	.077	.023	.135	.073	.022	.126	.069	.021	.119	.066	.020	
4.0	.140	.073	.021	.136	.071	.021	.129	.068	.020	.122	.065	.020	.115	.063	.019	
5.0	.133	.068	.020	.130	.067	.019	.123	.064	.019	.117	.062	.018	.111	.060	.018	
6.0	.127	.064	.018	.124	.063	.018	.118	.061	.018	.113	.059	.017	.108	.057	.017	
7.0	.121	.060	.017	.118	.059	.017	.113	.057	.017	.109	.056	.016	.104	.054	.016	
8.0	.116	.057	.016	.113	.056	.016	.109	.054	.016	.105	.053	.015	.101	.052	.015	
9.0	.111	.054	.015	.109	.053	.015	.105	.052	.015	.101	.051	.014	.097	.049	.014	
10.0	.106	.051	.014	.104	.050	.014	.101	.049	.014	.097	.048	.014	.094	.047	.014	

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	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.114	.132	.114	.099	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.141	.113	.092	.121	.098	.079	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.075	.112	.085	.065	.077	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.121	.087	.062	.104	.075	.054	.071	.052	.038	.041	.031	.022	.013	.010	.007	
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.090	.053	.029	.078	.046	.025	.054	.033	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°

## UGR(Unified Glare Rating) Table

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm											
NAME: 40002-6W-3000K						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:		
MFR.:						SUR.:88			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	14.0	13.4	14.2	14.3	6.6	7.4	6.8	7.6	7.8	
	3H	13.1	13.9	13.3	14.1	14.3	6.4	7.2	6.7	7.4	7.6
	4H	13.0	13.8	13.3	14.0	14.2	6.3	7.1	6.6	7.3	7.5
	6H	12.9	13.6	13.2	13.9	14.1	6.3	7.0	6.6	7.2	7.4
	8H	12.9	13.6	13.2	13.8	14.1	6.2	6.9	6.5	7.1	7.4
	12H	12.9	13.5	13.2	13.8	14.0	6.2	6.8	6.5	7.1	7.4
4H	2H	12.9	13.7	13.2	13.9	14.1	6.6	7.4	6.9	7.6	7.8
	3H	12.9	13.5	13.2	13.8	14.1	6.5	7.1	6.8	7.4	7.6
	4H	12.8	13.4	13.1	13.7	14.0	6.4	7.0	6.7	7.2	7.6
	6H	12.7	13.2	13.1	13.5	13.9	6.3	6.8	6.6	7.1	7.5
	8H	12.6	13.1	13.0	13.5	13.8	6.2	6.7	6.6	7.0	7.4
	12H	12.6	13.0	13.0	13.4	13.8	6.2	6.6	6.6	7.0	7.4
8H	4H	12.6	13.1	13.0	13.5	13.8	6.2	6.7	6.6	7.1	7.4
	6H	12.5	12.9	13.0	13.3	13.7	6.1	6.5	6.6	6.9	7.3
	8H	12.5	12.8	12.9	13.3	13.7	6.1	6.4	6.5	6.8	7.3
	12H	12.4	12.7	12.9	13.2	13.6	6.0	6.3	6.5	6.8	7.2
12H	4H	12.6	13.0	13.0	13.4	13.8	6.2	6.6	6.6	7.0	7.4
	6H	12.5	12.8	12.9	13.3	13.7	6.1	6.4	6.5	6.8	7.3
	8H	12.4	12.7	12.9	13.2	13.6	6.0	6.3	6.5	6.8	7.2
Variations with the observer position at spacings:											
S = 1.0H	+ 2.9 / - 4.0					+ 2.8 / - 8.1					
1.5H	+ 3.7 / - 4.8					+ 2.7 / - 6.7					
2.0H	+ 5.1 / - 7.8					+ 3.9 / -11.7					

CIE Pub.117, 376.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.4)  
Area: 0.024 m2

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°

### UTILIZATION FACTORS TABLE

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	Shielding Angle:

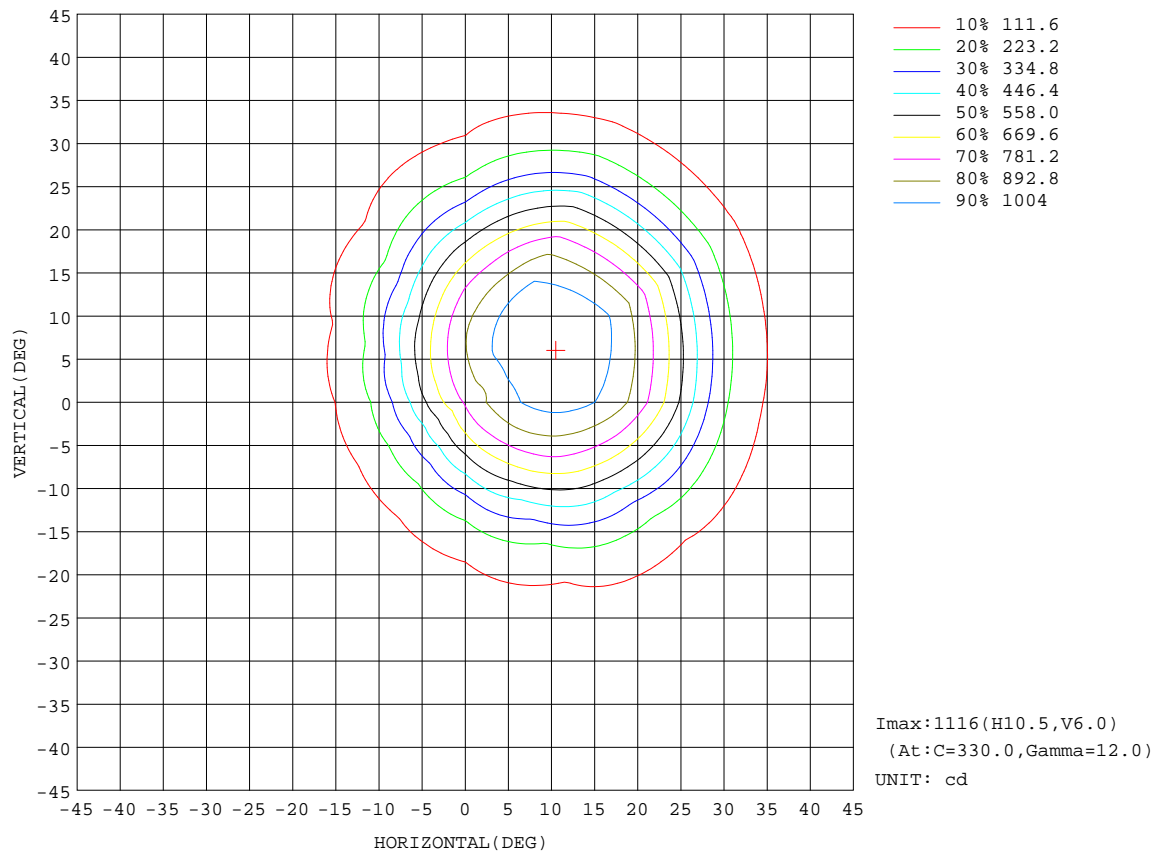
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	86	80	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	93	90	98	93	90	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	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	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°

### ISOCANDELA DIAGRAM

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	Shielding Angle:



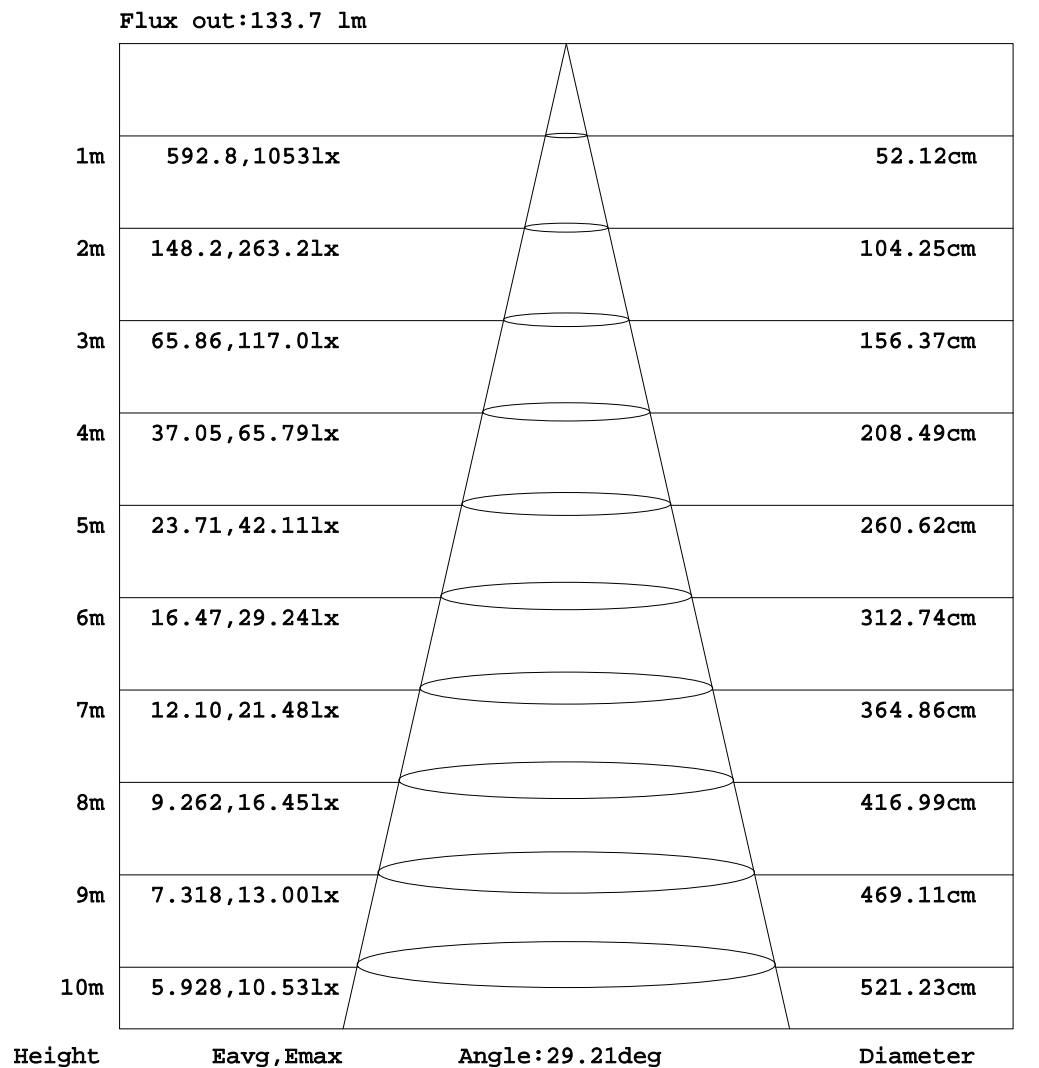
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°



### AAI Figure

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	Shielding Angle:



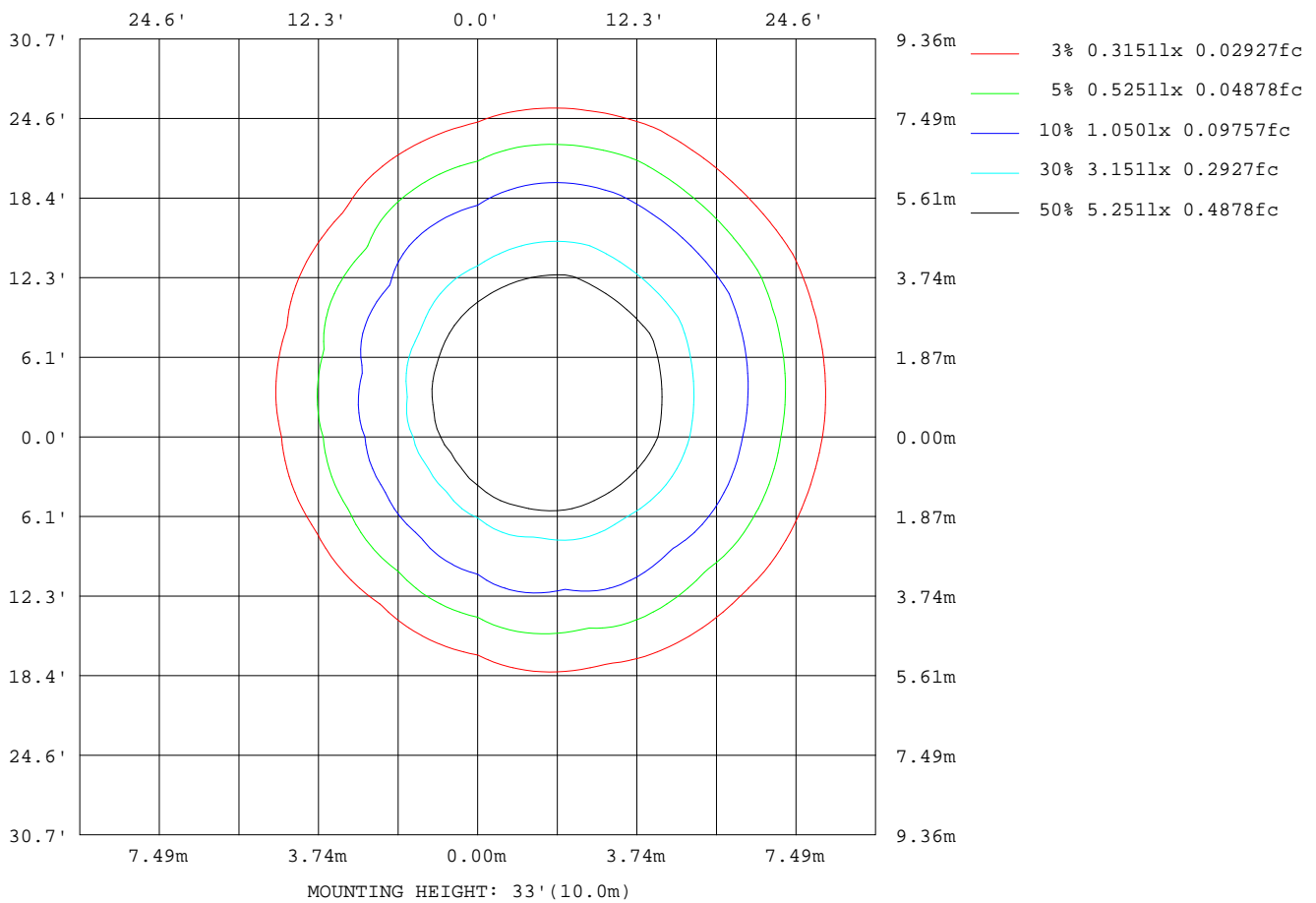
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: 1  
 Test Date: 2022-06-28

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
 Humidity: 65.0%  
 Test Distance: 3.106m [K=1.0000]  
 Remarks: 3197-60°

ISOLUX DIAGRAM

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 1  
Test Date: 2022-06-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity: 65.0%  
Test Distance: 3.106m [K=1.0000]  
Remarks: 3197-60°

### LED Avg.L Report

Test:U:47.997V I:0.1213A P:5.8220W PF:1.0000 Freq:49.99Hz Lamp Flux:376.397x1 lm		
NAME: 40002-6W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:88	Shielding Angle:

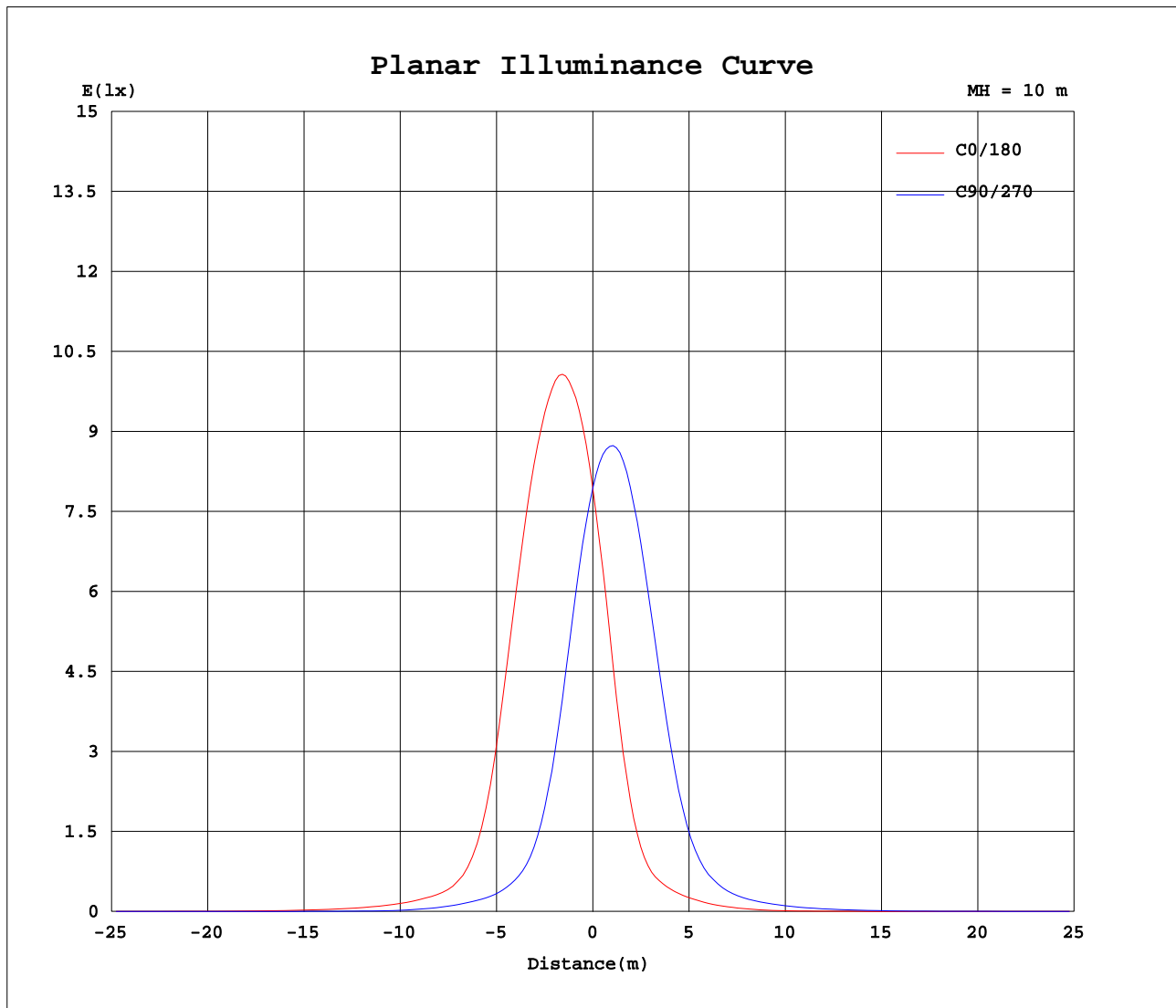
AvgL	cd/m2
L_0~180(65)av	190
L_0~180(75)av	88
L_0~180(85)av	0
L_90~270(65)av	152
L_90~270(75)av	0
L_90~270(85)av	0
L_45(65)av	196
L_45(75)av	105
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:1  
Test Date:2022-06-28

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:3.106m [K=1.0000]  
Remarks: 3197-60°

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 1  
Test Date: 2022-06-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.416  
Humidity: 65.0%  
Test Distance: 3.106m [K=1.0000]  
Remarks: 3197-60°

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.416
Humidity:65.0%
Test Distance:3.106m [K=1.0000]
Remarks: 3197-60°

```