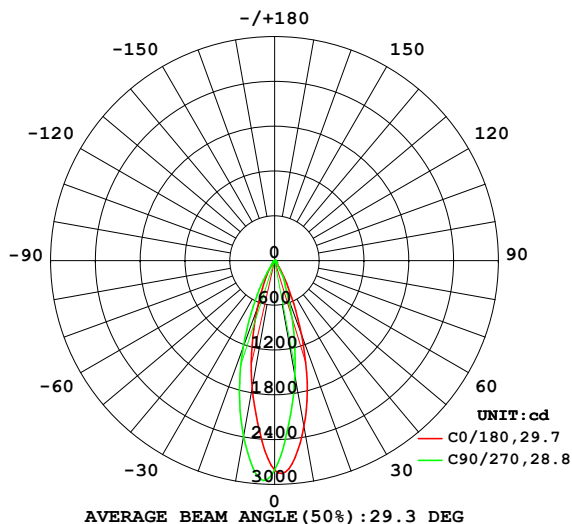


LUMINAIRE PHOTOMETRIC TEST REPORT

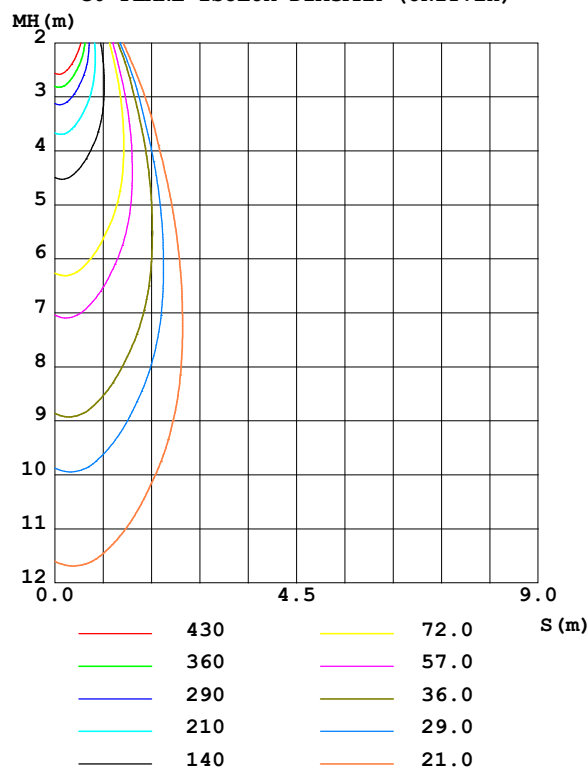
Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 71.84 lm/W			
MODEL		I _{max} (cd)	2998	S/MH(C0/180)	0.43
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	0.60
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	969.55	η UP,DN(C0-180)	0.0,43.0
NOMINAL FLUX(lm)	969.548	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,57.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	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: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators:
Test Date: 2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

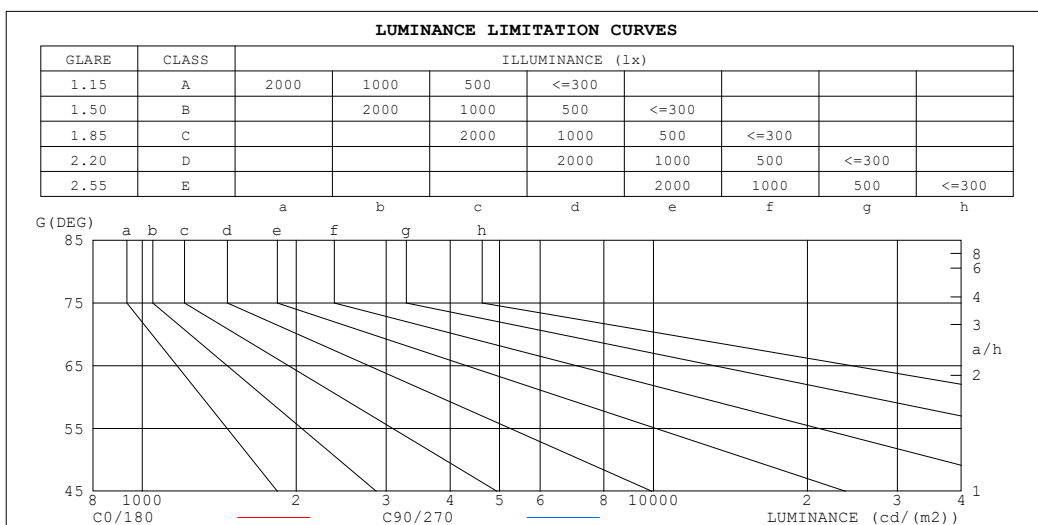
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2259	1874	1577	1543	1739	2063	2395	2530	0- 10	224.0	224.0	23.1,23.1
20	1057	744.5	546.8	534.1	685.9	911.8	1236	1286	10- 20	387.1	611.2	63,63
30	245.1	228.2	153.4	184.1	180.0	247.5	303.4	339.1	20- 30	223.2	834.4	86.1,86.1
40	47.99	52.48	39.45	45.74	39.99	61.44	51.06	86.38	30- 40	71.53	905.9	93.4,93.4
50	26.23	31.93	23.38	29.03	24.14	32.90	26.41	35.36	40- 50	29.04	935.0	96.4,96.4
60	12.17	15.17	12.41	14.42	12.24	15.15	11.89	16.05	50- 60	18.18	953.2	98.3,98.3
70	5.546	7.317	6.240	7.802	6.065	6.828	5.273	6.583	60- 70	9.640	962.8	99.3,99.3
80	3.081	3.703	3.708	4.123	3.646	3.259	2.648	3.005	70- 80	5.005	967.8	99.8,99.8
90	0.0237	0.0225	0.0249	0.0282	0.0078	0.0078	0.0127	0.0094	80- 90	1.740	969.5	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: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:



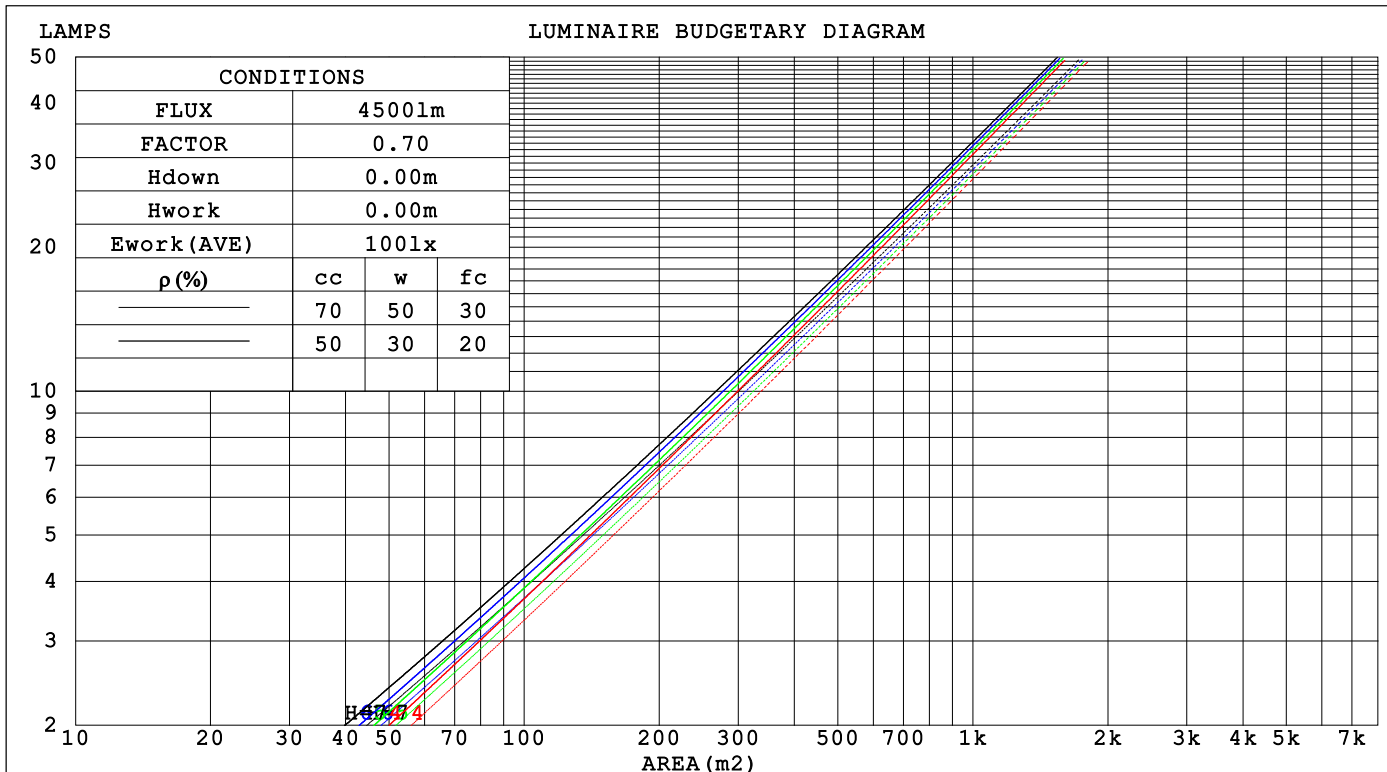
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	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	1.12	1.09	1.07	1.09	1.07	1.06	1.05	1.04	1.02	1.02	1.01	.99	.98	.97	.97	.95
2.0	1.05	1.01	.99	1.03	1.00	.97	1.00	.98	.95	.97	.95	.93	.95	.93	.91	.90
3.0	.99	.95	.92	.98	.94	.91	.95	.92	.89	.93	.90	.88	.91	.89	.87	.85
4.0	.94	.90	.86	.93	.89	.85	.91	.87	.84	.89	.86	.83	.87	.85	.83	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.86	.82	.79	.84	.81	.79	.77
6.0	.86	.81	.77	.85	.80	.77	.84	.79	.76	.82	.79	.76	.81	.78	.75	.74
7.0	.82	.77	.73	.81	.77	.73	.80	.76	.73	.79	.75	.72	.78	.75	.72	.71
8.0	.79	.74	.70	.78	.73	.70	.77	.73	.70	.76	.72	.70	.75	.72	.69	.68
9.0	.76	.71	.67	.75	.70	.67	.74	.70	.67	.73	.70	.67	.73	.69	.67	.65
10.0	.73	.68	.65	.72	.68	.65	.72	.67	.64	.71	.67	.64	.70	.67	.64	.63



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz			UTHDi:0.00% ITHDi:0.00% KDisp:0			Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless			TYPE:			WEIGHT:		
SPEC.: 3000K			DIM.:			SERIAL No.:		
MFR.: ENVISION LIGHTING			SUR.:			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	.161	.092	.029	.155	.088	.028	.142	.082	.026	.131	.075	.024	.120	.070	.022		
2.0	.151	.083	.025	.146	.080	.025	.135	.075	.023	.126	.071	.022	.117	.066	.021		
3.0	.142	.076	.023	.137	.074	.022	.129	.070	.021	.120	.066	.020	.113	.062	.019		
4.0	.134	.069	.020	.130	.068	.020	.122	.065	.019	.115	.062	.019	.109	.059	.018		
5.0	.126	.064	.019	.123	.063	.018	.116	.061	.018	.110	.058	.017	.105	.056	.017		
6.0	.120	.060	.017	.117	.059	.017	.111	.057	.017	.106	.055	.016	.101	.053	.016		
7.0	.114	.056	.016	.111	.055	.016	.106	.054	.015	.102	.052	.015	.097	.050	.015		
8.0	.108	.053	.015	.106	.052	.015	.102	.051	.015	.098	.049	.014	.094	.048	.014		
9.0	.104	.050	.014	.101	.049	.014	.098	.048	.014	.094	.047	.013	.090	.046	.013		
10.0	.099	.048	.013	.097	.047	.013	.094	.046	.013	.091	.045	.013	.087	.044	.013		

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	.145	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016		
2.0	.154	.133	.115	.131	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013		
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011		
4.0	.128	.098	.076	.110	.085	.066	.076	.059	.046	.044	.035	.027	.014	.011	.009		
5.0	.119	.086	.063	.102	.075	.055	.070	.052	.038	.041	.031	.023	.013	.010	.008		
6.0	.110	.077	.053	.095	.067	.046	.065	.047	.032	.038	.027	.019	.012	.009	.006		
7.0	.103	.069	.045	.089	.060	.039	.061	.042	.028	.036	.025	.016	.012	.008	.005		
8.0	.097	.062	.039	.084	.054	.034	.058	.038	.024	.034	.022	.014	.011	.007	.005		
9.0	.092	.057	.034	.079	.049	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004		
10.0	.087	.052	.029	.075	.045	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm										
NAME: 4寸白色方形trimless					TYPE:			WEIGHT:		
SPEC.: 3000K					DIM.:			SERIAL No.:		
MFR.: ENVISION LIGHTING					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	3.4	4.2	3.6	4.3	4.5	2.3	3.1	2.5	3.3	3.4
3H	3.7	4.4	3.9	4.6	4.8	2.8	3.6	3.1	3.8	4.0
4H	3.8	4.5	4.1	4.7	4.9	3.1	3.8	3.4	4.0	4.2
6H	3.9	4.6	4.2	4.8	5.1	3.4	4.1	3.7	4.3	4.6
8H	4.0	4.7	4.3	4.9	5.2	3.5	4.2	3.9	4.4	4.7
12H	4.1	4.7	4.4	5.0	5.2	3.6	4.2	3.9	4.5	4.8
4H 2H	3.5	4.2	3.8	4.4	4.6	2.6	3.3	2.9	3.5	3.7
3H	4.0	4.6	4.3	4.9	5.1	3.3	3.9	3.6	4.2	4.4
4H	4.2	4.7	4.5	5.0	5.3	3.7	4.2	4.0	4.5	4.8
6H	4.5	5.0	4.8	5.3	5.6	4.2	4.6	4.5	5.0	5.3
8H	4.6	5.1	5.0	5.4	5.8	4.4	4.8	4.7	5.2	5.5
12H	4.7	5.2	5.1	5.5	5.9	4.5	4.9	4.9	5.3	5.6
8H 4H	4.3	4.7	4.7	5.1	5.5	3.8	4.3	4.2	4.6	5.0
6H	4.7	5.1	5.1	5.5	5.9	4.5	4.8	4.9	5.2	5.6
8H	4.9	5.3	5.4	5.7	6.1	4.7	5.1	5.2	5.5	5.9
12H	5.2	5.4	5.6	5.9	6.4	4.9	5.2	5.4	5.7	6.1
12H 4H	4.3	4.7	4.7	5.1	5.5	3.8	4.2	4.2	4.6	5.0
6H	4.7	5.1	5.2	5.5	5.9	4.5	4.8	4.9	5.2	5.7
8H	5.0	5.3	5.5	5.8	6.2	4.8	5.1	5.3	5.6	6.0
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.7 / - 0.9					+ 0.6 / - 0.6				
1.5H	+ 0.6 / - 0.7					+ 0.3 / - 0.6				
2.0H	+ 1.1 / - 1.2					+ 0.7 / - 0.8				

CIE Pub.117, 969.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.1)
Area: 0.111111 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:

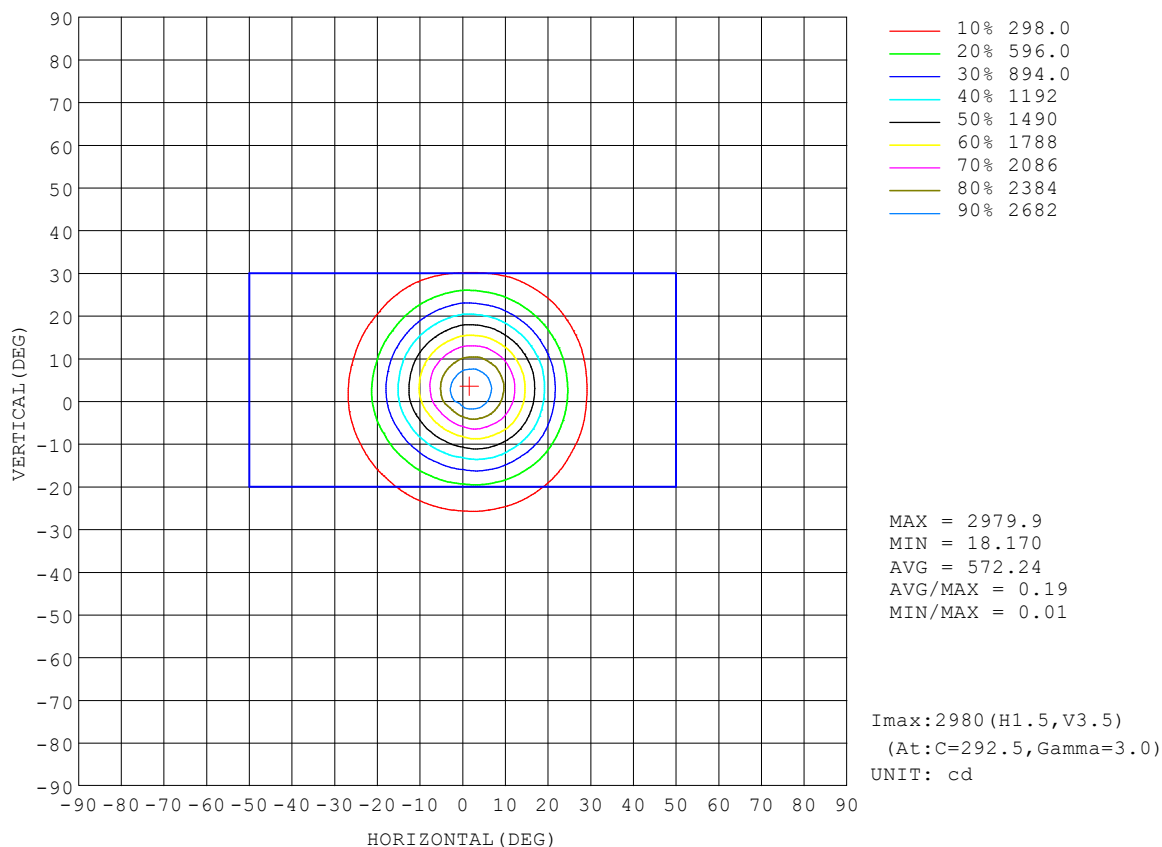
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	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	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	100	95
3.00	112	108	105	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: 22.5DEG
Test Speed: HIGH
Temperature: 25.3℃
Operators:
Test Date: 2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:

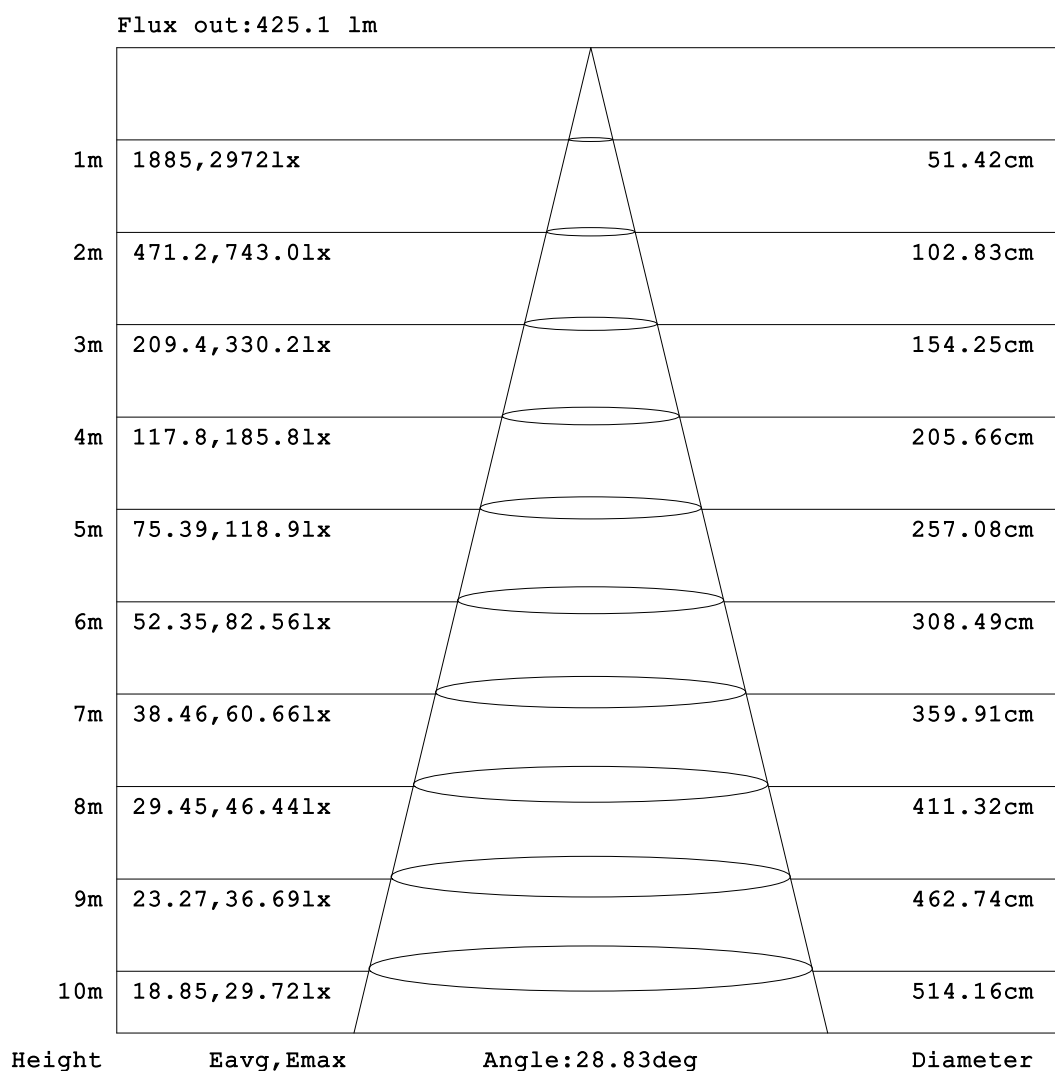


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:

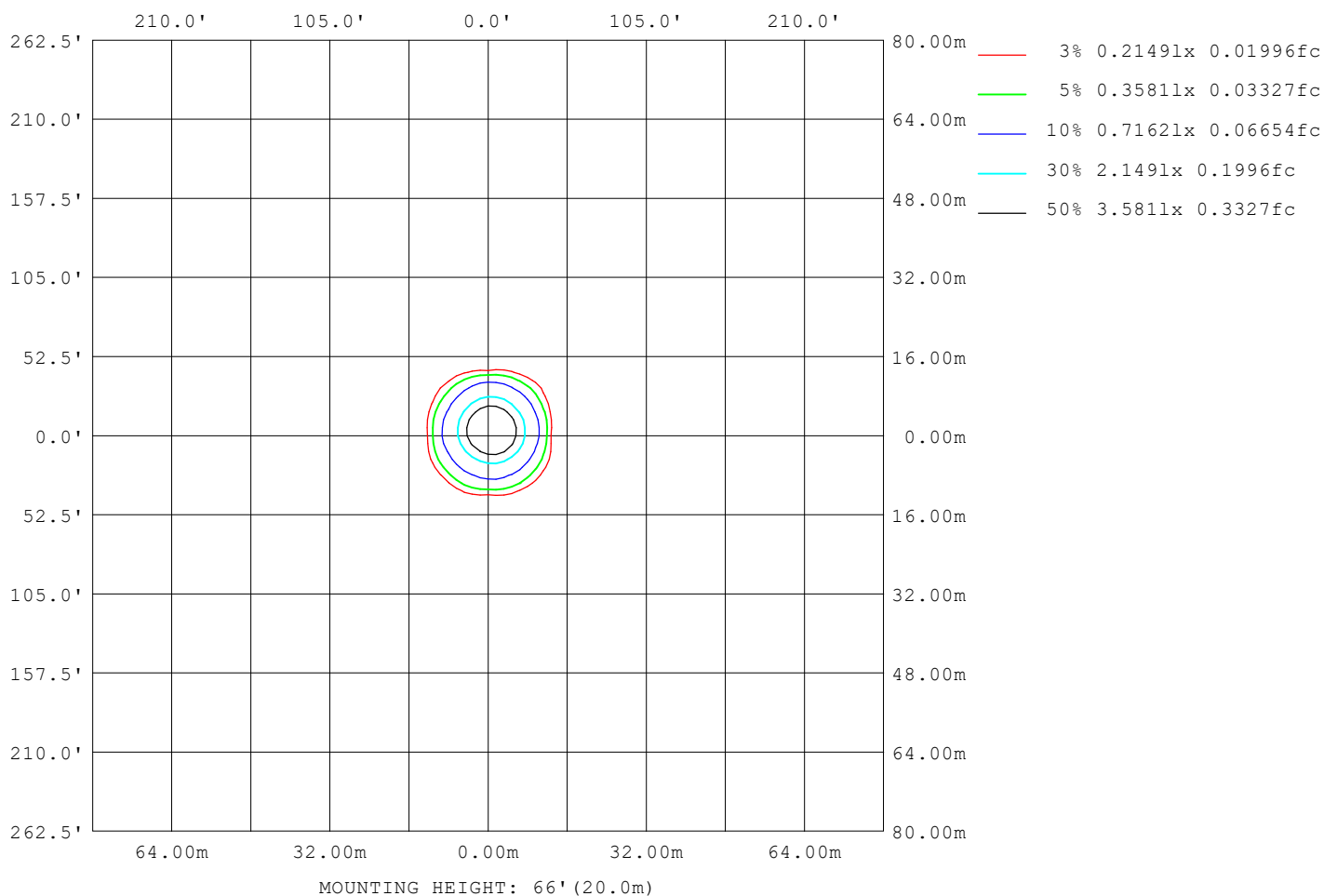


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:

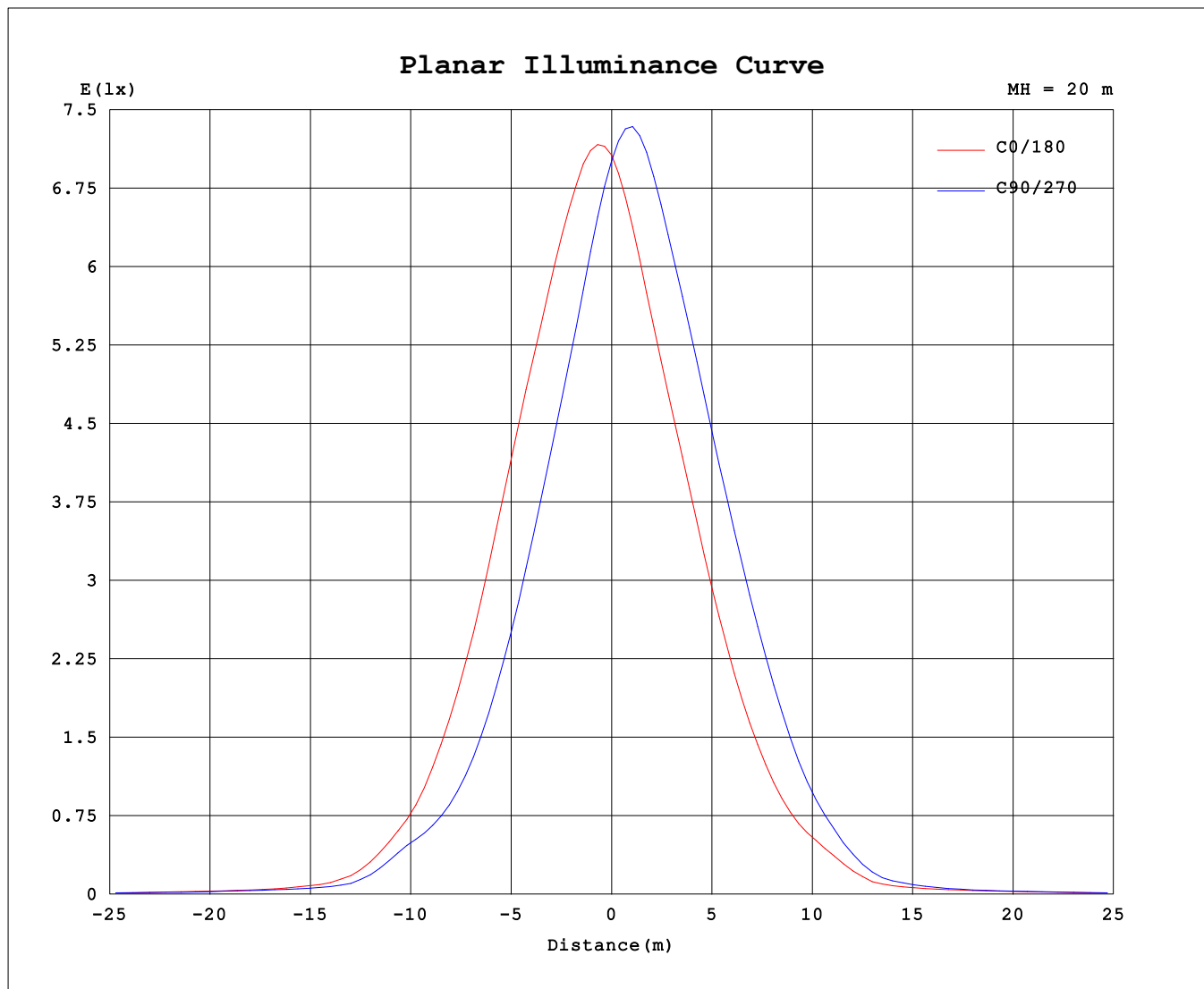
AvgL	cd/m2
L_0~180 (65) av	186
L_0~180 (75) av	142
L_0~180 (85) av	195
L_90~270 (65) av	185
L_90~270 (75) av	142
L_90~270 (85) av	139
L_45 (65) av	218
L_45 (75) av	170
L_45 (85) av	160

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2022-06-23

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators:
Test Date: 2022-06-23

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

Test:U:120.19V I:0.1139A P:13.497W PF:0.9857 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:969.548x1 lm		
NAME: 4寸白色方形trimless	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: ENVISION LIGHTING	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```