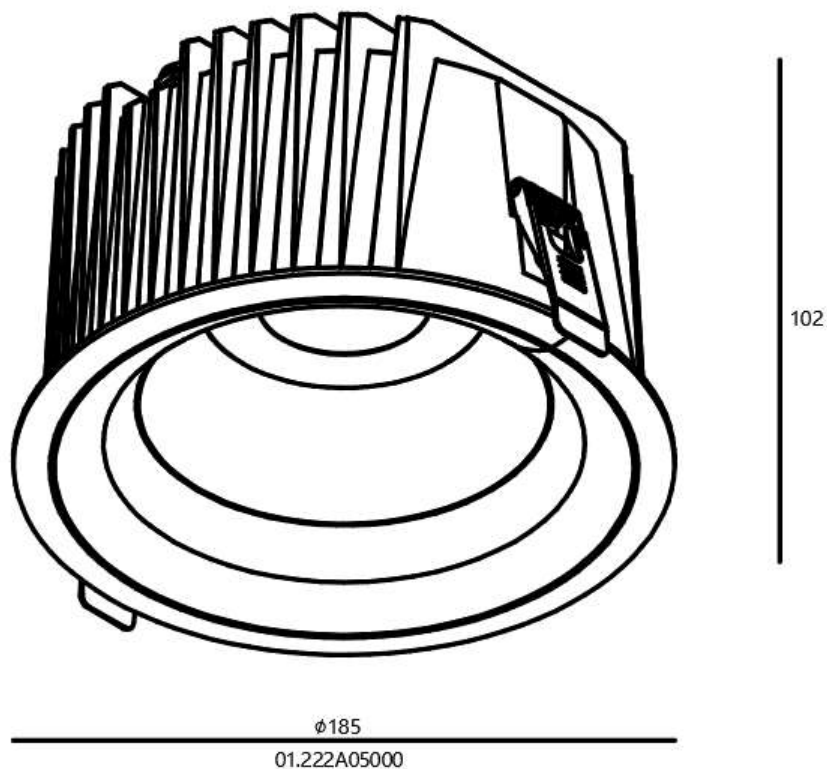


01.222A05000



Light Output Ratio:	100.0%	
Luminaire Power:	42.44 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.70	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QINBOMIN
Test Date: 2023-03-12

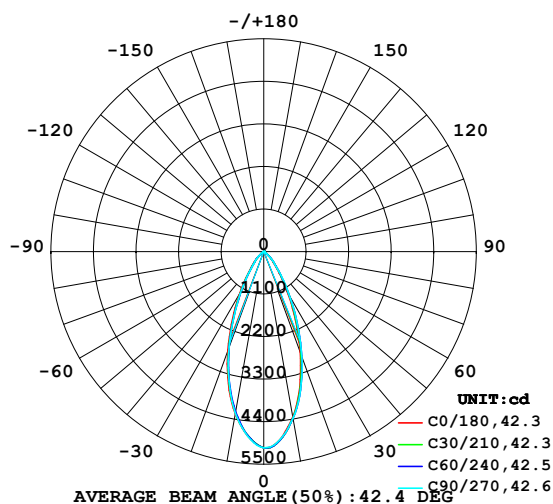
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

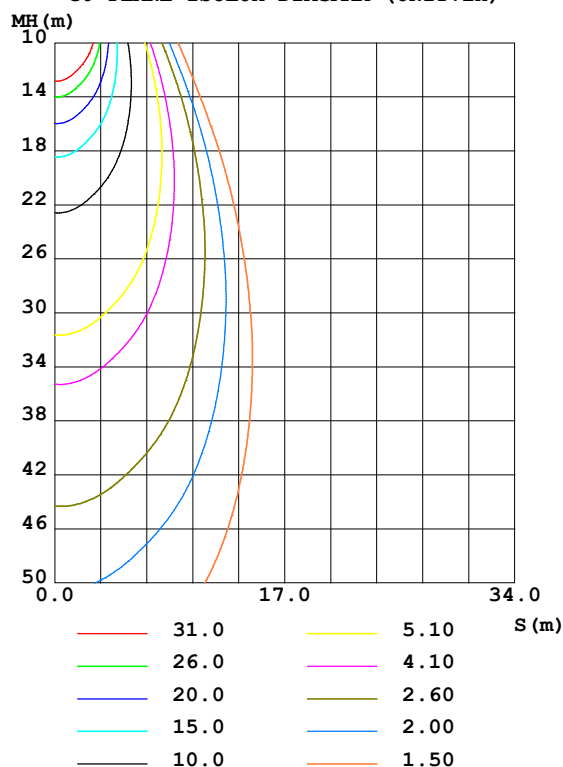
Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 72.55 lm/W			
MODEL	01.222A05000	I _{max} (cd)	5080	S/MH (C0/180)	0.67
NOMINAL POWER (W)	45	LOR (%)	100.0	S/MH (C90/270)	0.66
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	3078.6	η UP, DN (C0-180)	0.0, 51.9
NOMINAL FLUX (lm)	3078.63	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 48.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	0.70

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QINBOMIN
 Test Date: 2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 11.700m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

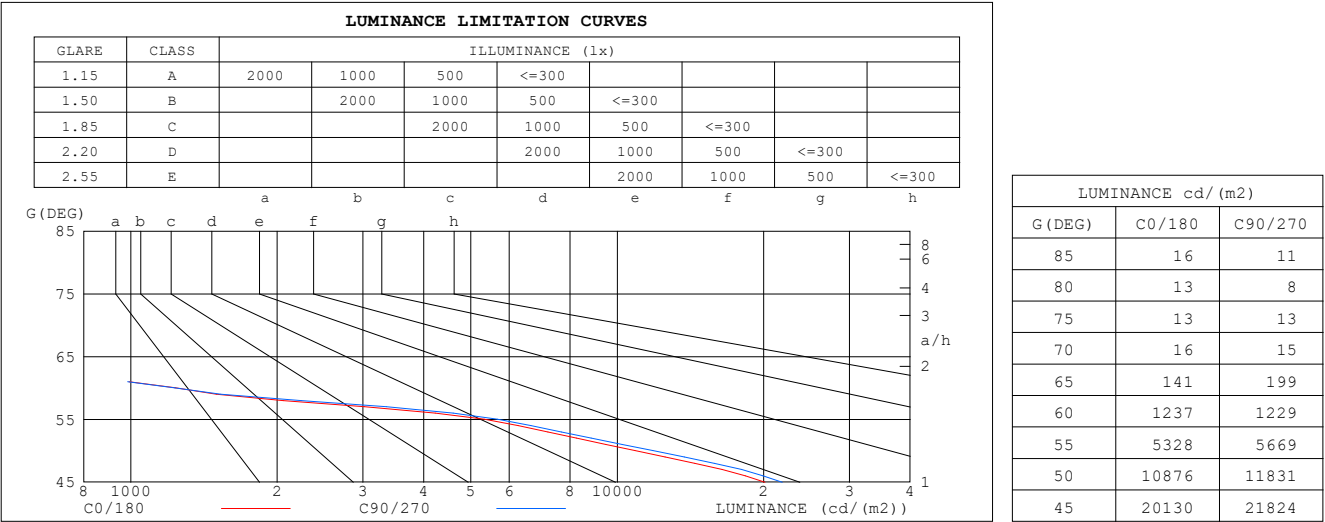
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	4340	4384	4376	4332	4251	4208	4240	4288	0- 10	444.1	444.1	14.4,14.4
20	2760	2867	2888	2843	2719	2618	2629	2706	10- 20	986.7	1431	46.5,46.5
30	1265	1354	1371	1340	1238	1153	1149	1199	20- 30	887.0	2318	75.3,75.3
40	457.1	492.2	498.6	484.1	445.4	412.2	411.7	425.4	30- 40	487.6	2805	91.1,91.1
50	143.1	157.7	156.8	142.8	125.6	115.5	119.5	127.8	40- 50	218.0	3023	98.2,98.2
60	12.67	13.61	12.68	11.08	9.357	8.518	10.24	11.46	50- 60	52.51	3076	99.9,99.9
70	0.1149	0.1057	0.1061	0.0869	0.1243	0.1251	0.1156	0.1353	60- 70	2.691	3079	100,100
80	0.0479	0.0385	0.0291	0.0193	0.0573	0.0577	0.0482	0.0580	70- 80	0.0756	3079	100,100
90	0.0191	0.0096	0.0096	0.0193	0.0479	0.0288	0.0386	0.0290	80- 90	0.0369	3079	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: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QINBOMIN
 Test Date:2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:



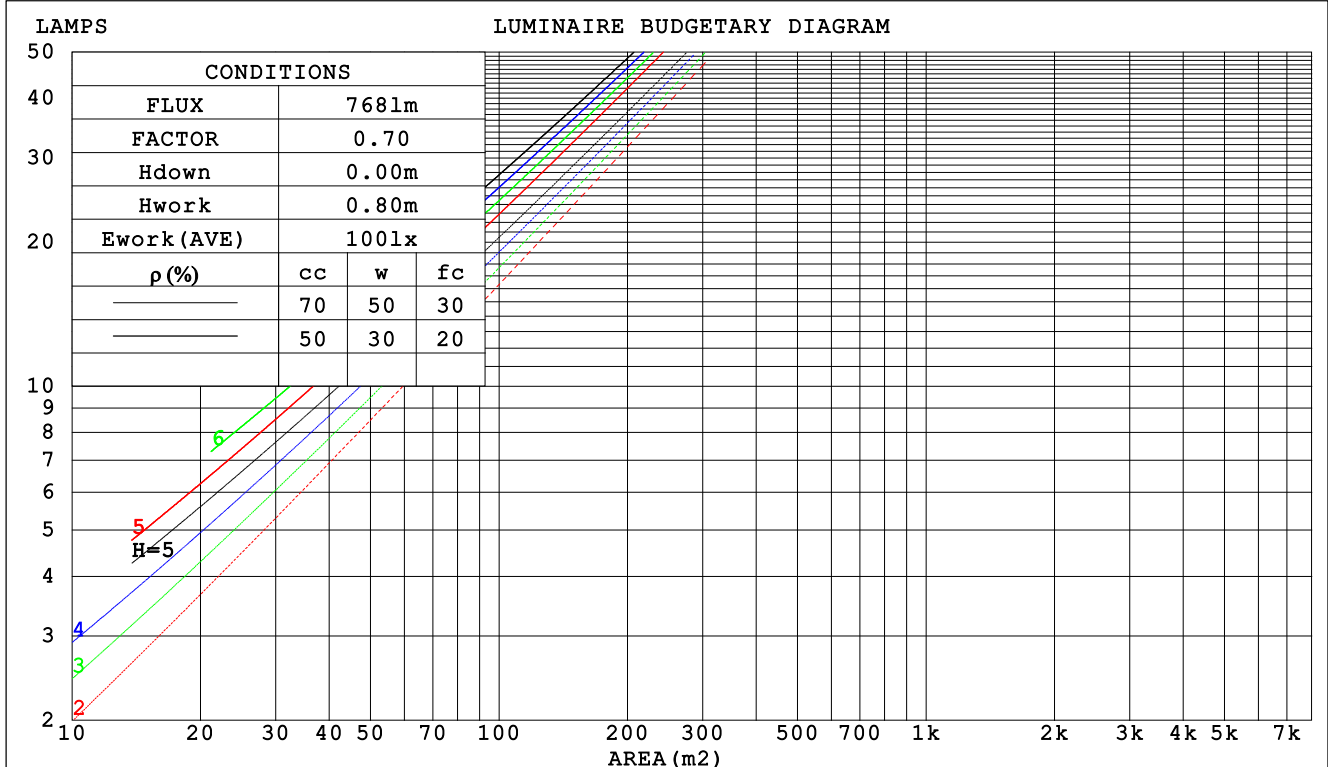
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.91	.90	.88
3.0	.97	.92	.89	.96	.91	.88	.93	.90	.87	.91	.88	.85	.89	.86	.84	.82
4.0	.91	.86	.82	.90	.85	.81	.88	.84	.80	.86	.82	.80	.84	.81	.79	.77
5.0	.86	.80	.76	.85	.80	.76	.83	.79	.75	.81	.78	.74	.80	.77	.74	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.76	.71	.67	.76	.70	.67	.75	.70	.66	.73	.69	.66	.72	.68	.66	.64
8.0	.72	.67	.63	.72	.66	.63	.71	.66	.62	.70	.65	.62	.69	.65	.62	.61
9.0	.69	.63	.59	.68	.63	.59	.67	.63	.59	.67	.62	.59	.66	.62	.59	.57
10.0	.65	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.63	.59	.56	.55



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	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	.171	.097	.031	.164	.094	.030	.152	.087	.028	.140	.081	.026	.130	.075	.024		
2.0	.164	.090	.028	.158	.087	.027	.148	.082	.025	.138	.077	.024	.129	.073	.023		
3.0	.156	.083	.025	.151	.081	.024	.142	.077	.023	.134	.073	.022	.126	.070	.022		
4.0	.148	.077	.023	.144	.076	.022	.137	.072	.022	.129	.070	.021	.123	.067	.020		
5.0	.141	.072	.021	.138	.071	.021	.131	.068	.020	.125	.066	.020	.119	.064	.019		
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.120	.063	.018	.115	.061	.018		
7.0	.129	.064	.018	.126	.063	.018	.121	.061	.018	.116	.059	.017	.111	.058	.017		
8.0	.123	.060	.017	.121	.060	.017	.116	.058	.017	.112	.057	.016	.108	.055	.016		
9.0	.118	.057	.016	.116	.056	.016	.112	.055	.016	.108	.054	.015	.104	.053	.015		
10.0	.113	.054	.015	.111	.054	.015	.108	.053	.015	.104	.052	.015	.101	.051	.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	.087	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.122	.098	.078	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.132	.099	.073	.113	.085	.064	.078	.059	.045	.045	.035	.027	.015	.011	.009	
5.0	.123	.087	.060	.106	.075	.053	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.089	.055	.032	.061	.039	.023	.036	.023	.014	.012	.008	.004	
9.0	.098	.059	.032	.084	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.093	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm										
NAME:					TYPE:Embedded Luminaire			WEIGHT:1.40kg		
SPEC.:					DIM.: ** (mm)			SERIAL No.:G032498		
MFR.: Guangdong KC Lighting CO.,LTD					SUR.:162mm			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	17.5	18.5	17.8	18.6	18.8	17.9	18.8	18.1	19.0	19.1
3H	17.4	18.2	17.6	18.4	18.6	17.7	18.5	18.0	18.7	18.9
4H	17.3	18.1	17.6	18.3	18.5	17.6	18.4	17.9	18.6	18.9
6H	17.2	17.9	17.5	18.2	18.4	17.5	18.3	17.8	18.5	18.8
8H	17.2	17.9	17.5	18.1	18.4	17.5	18.2	17.8	18.5	18.7
12H	17.1	17.8	17.4	18.1	18.3	17.4	18.1	17.8	18.4	18.7
4H 2H	17.3	18.1	17.6	18.3	18.5	17.6	18.4	17.9	18.7	18.9
3H	17.1	17.8	17.5	18.1	18.4	17.5	18.2	17.8	18.4	18.7
4H	17.0	17.7	17.4	18.0	18.3	17.4	18.0	17.7	18.3	18.6
6H	16.9	17.5	17.3	17.8	18.2	17.3	17.8	17.7	18.2	18.5
8H	16.9	17.4	17.3	17.7	18.1	17.2	17.7	17.6	18.1	18.4
12H	16.8	17.3	17.3	17.7	18.1	17.2	17.6	17.6	18.0	18.4
8H 4H	16.9	17.4	17.3	17.7	18.1	17.2	17.7	17.6	18.1	18.4
6H	16.8	17.2	17.2	17.6	18.0	17.1	17.5	17.5	17.9	18.3
8H	16.7	17.1	17.2	17.5	18.0	17.1	17.4	17.5	17.8	18.3
12H	16.7	17.0	17.1	17.4	17.9	17.0	17.3	17.5	17.8	18.2
12H 4H	16.8	17.3	17.3	17.7	18.1	17.2	17.6	17.6	18.0	18.4
6H	16.7	17.1	17.2	17.5	18.0	17.1	17.4	17.5	17.8	18.3
8H	16.7	17.0	17.1	17.4	17.9	17.0	17.3	17.5	17.8	18.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -11.1					+ 2.7 / -11.0				
1.5H	+ 3.4 / - 6.1					+ 3.7 / - 6.3				
2.0H	+ 5.8 / -17.6					+ 5.9 / -18.0				

CIE Pub.117, 3079 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.9$)
Area: 0.0206015 m²

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:

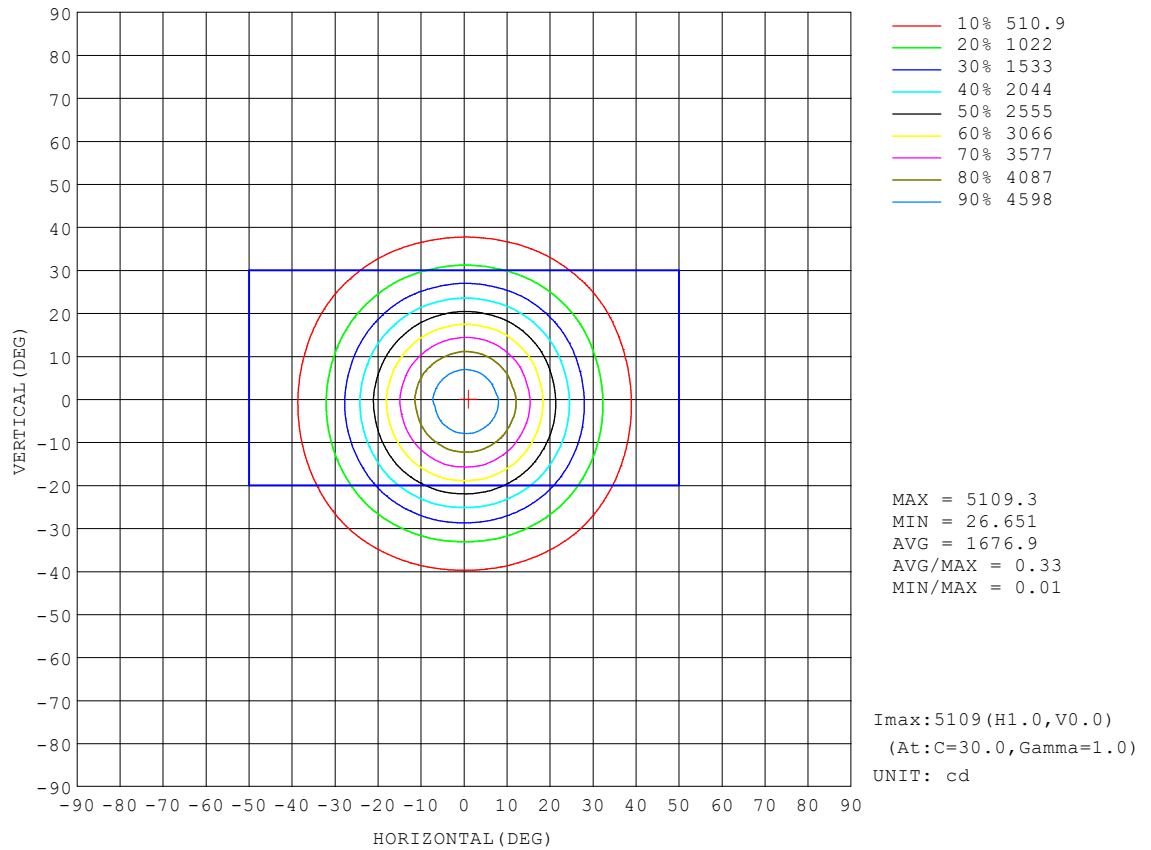
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	85	79	75	71
0.80	94	88	84	93	87	84	92	87	83	79
1.00	99	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	94	100	96	93	88
1.50	106	101	97	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QINBOMIN
 Test Date:2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:

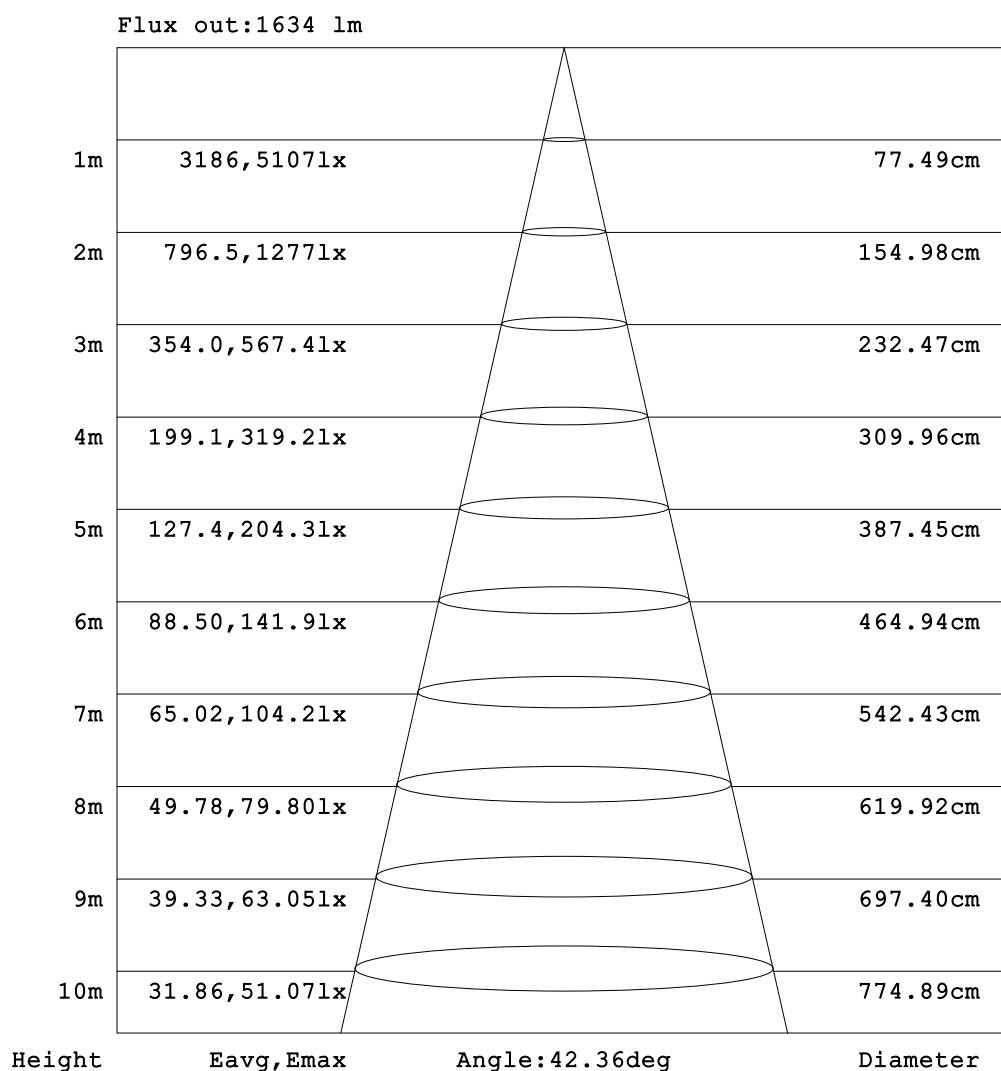


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:



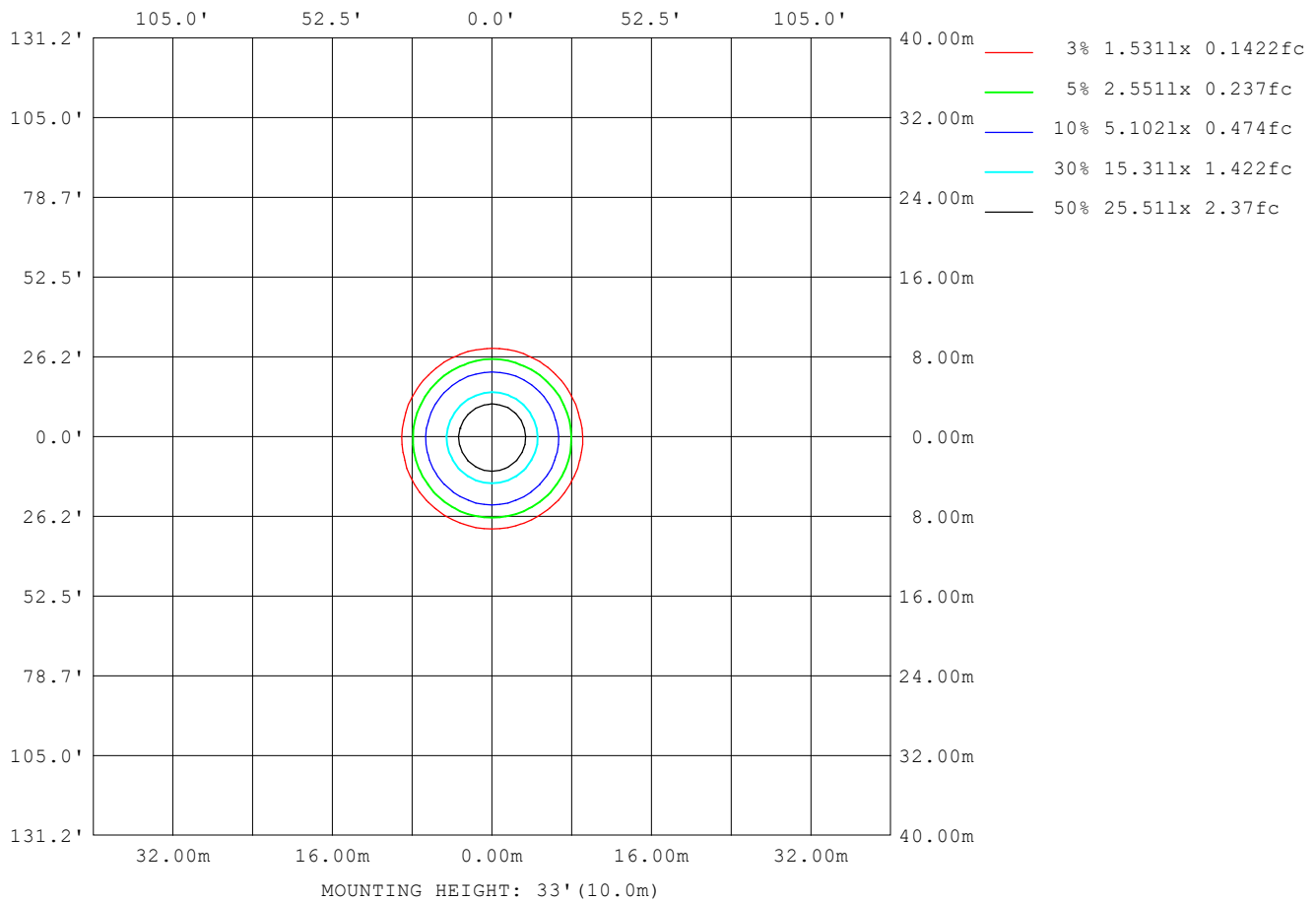
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QINBOMIN
 Test Date:2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:

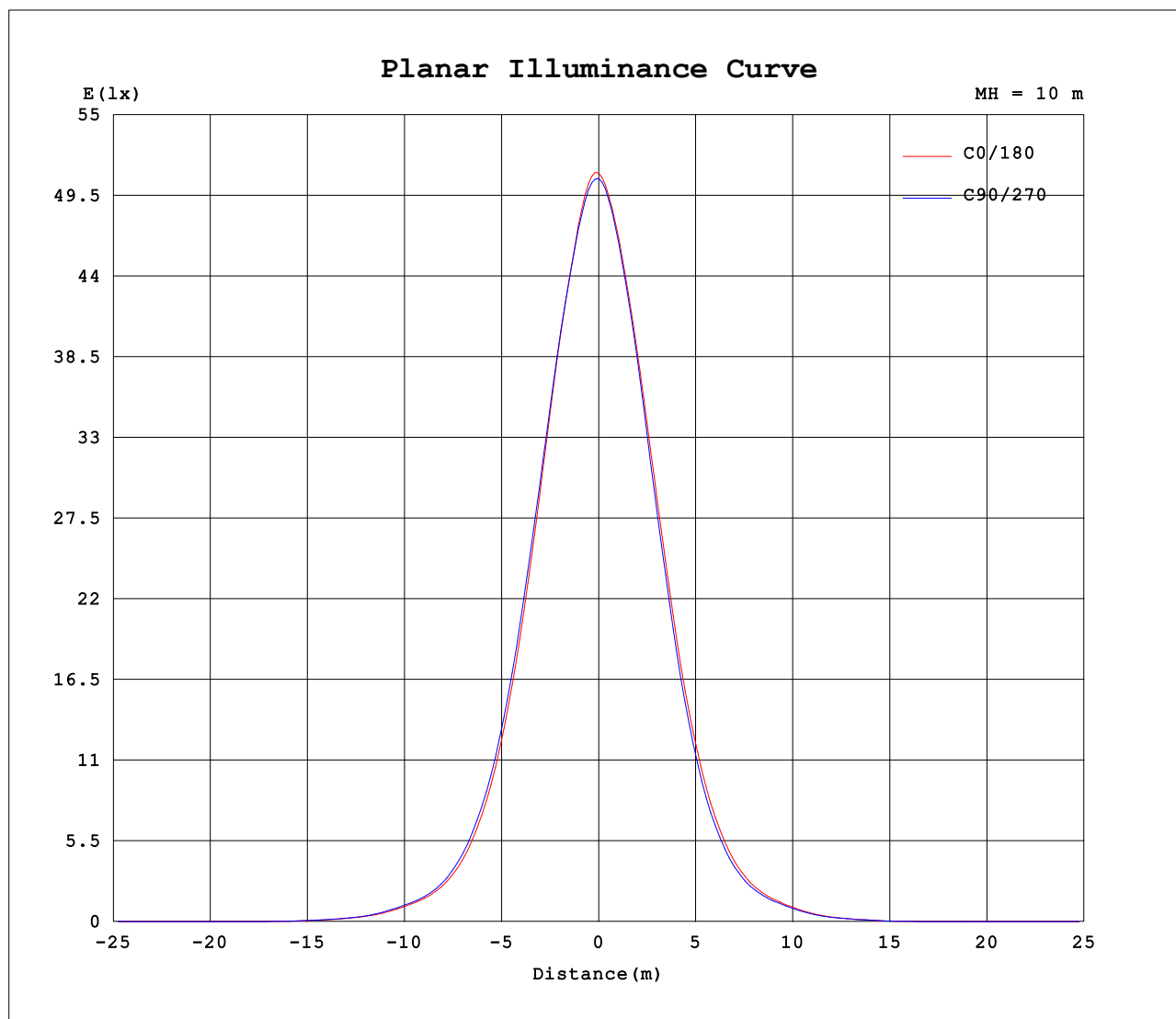
AvgL	cd/m2
L_0~180 (65) av	81
L_0~180 (75) av	13
L_0~180 (85) av	21
L_90~270 (65) av	110
L_90~270 (75) av	14
L_90~270 (85) av	16
L_45 (65) av	89
L_45 (75) av	12
L_45 (85) av	16

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QINBOMIN
Test Date: 2023-03-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.23V I:0.1974A P:42.436W PF:0.9760 Freq:49.99Hz Lamp Flux:3078.63x1 lm		
NAME:	TYPE:Embedded Luminaire	WEIGHT:1.40kg
SPEC.:	DIM.: ** (mm)	SERIAL No.:G032498
MFR.: Guangdong KC Lighting CO.,LTD	SUR.:162mm	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QINBOMIN
Test Date:2023-03-12

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```

