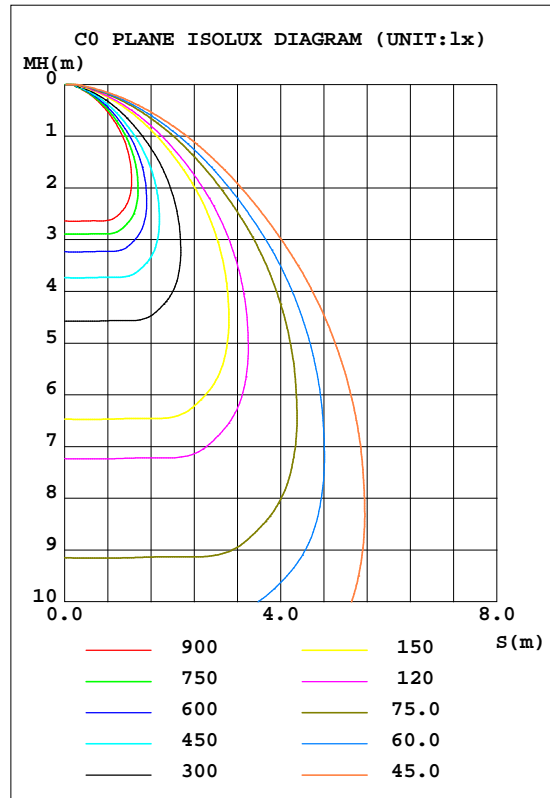
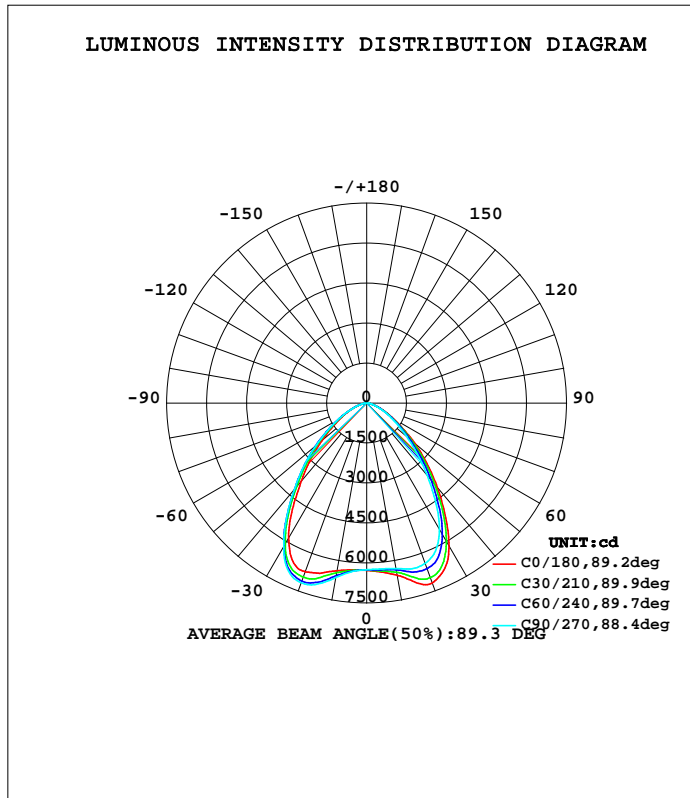


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.5V I:0.4462A P:100.3W PF:0.9772 Lamp Flux:13548.3x1 lm		
NAME:	TYPE:工厂灯	WEIGHT:
SPEC.:GC51-100W-6500K	DIM.:	SERIAL No.:20201029F8
MFR.: 江苏碧松照明股份有限公司	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 135.03 lm/W			
MODEL		I _{max} (cd)	7191	S/MH(C0/180)	1.23
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	13548	η UP, DN(C0-180)	0.0,47.8
NOMINAL FLUX(lm)	13548.3	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,52.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.30



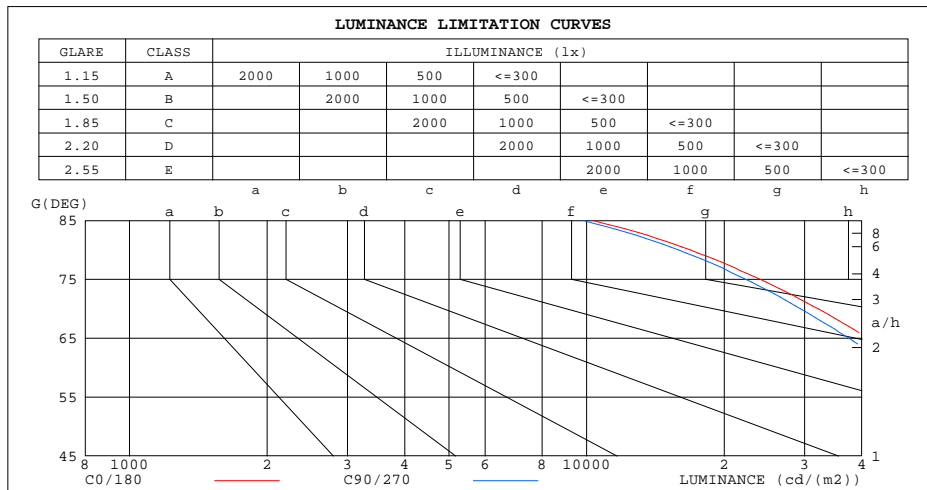
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum,lamp
5	6361	6297	6247	6226	6283	6320	6346	6334	0- 5	150.0	150.0	1.11,1.11
10	6553	6388	6304	6279	6387	6520	6636	6620	5- 10	456.2	606.2	4.47,4.47
15	6940	6649	6441	6378	6603	6878	7018	6996	10- 15	782.9	1389	10.3,10.3
20	7183	6787	6404	6403	6733	7035	7175	7146	15- 20	1125	2514	18.6,18.6
25	6888	6552	6119	6134	6559	6838	6952	6931	20- 25	1419	3933	29,29
30	6176	5842	5464	5468	5858	6188	6239	6201	25- 30	1593	5526	40.8,40.8
35	5138	4881	4508	4494	4859	5201	5241	5225	30- 35	1600	7126	52.6,52.6
40	4126	3883	3531	3556	3821	4183	4211	4235	35- 40	1474	8600	63.5,63.5
45	3194	2995	2685	2727	2972	3274	3322	3329	40- 45	1289	9889	73,73
50	2368	2194	1975	2043	2206	2465	2504	2487	45- 50	1072	10961	80.9,80.9
55	1654	1561	1425	1488	1579	1766	1787	1789	50- 55	842.1	11803	87.1,87.1
60	1136	1080	1001	1049	1114	1223	1240	1236	55- 60	631.8	12435	91.8,91.8
65	756.0	718.5	682.1	708.3	759.0	817.1	817.6	809.9	60- 65	455.2	12890	95.1,95.1
70	471.9	448.2	432.0	450.3	484.6	514.9	504.9	500.1	65- 70	308.8	13199	97.4,97.4
75	267.0	254.3	248.2	259.1	279.4	293.2	284.6	281.0	70- 75	192.1	13391	98.8,98.8
80	125.9	120.2	118.6	123.9	134.4	140.8	136.7	133.0	75- 80	104.2	13495	99.6,99.6
85	38.63	36.68	36.84	38.57	43.26	45.36	43.70	41.83	80- 85	43.76	13539	99.9,99.9
90	3.122	2.782	2.741	2.728	3.102	3.748	3.374	3.455	85- 90	9.416	13548	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd Less than 25% Percent = 10.7 %										UNIT:lm	



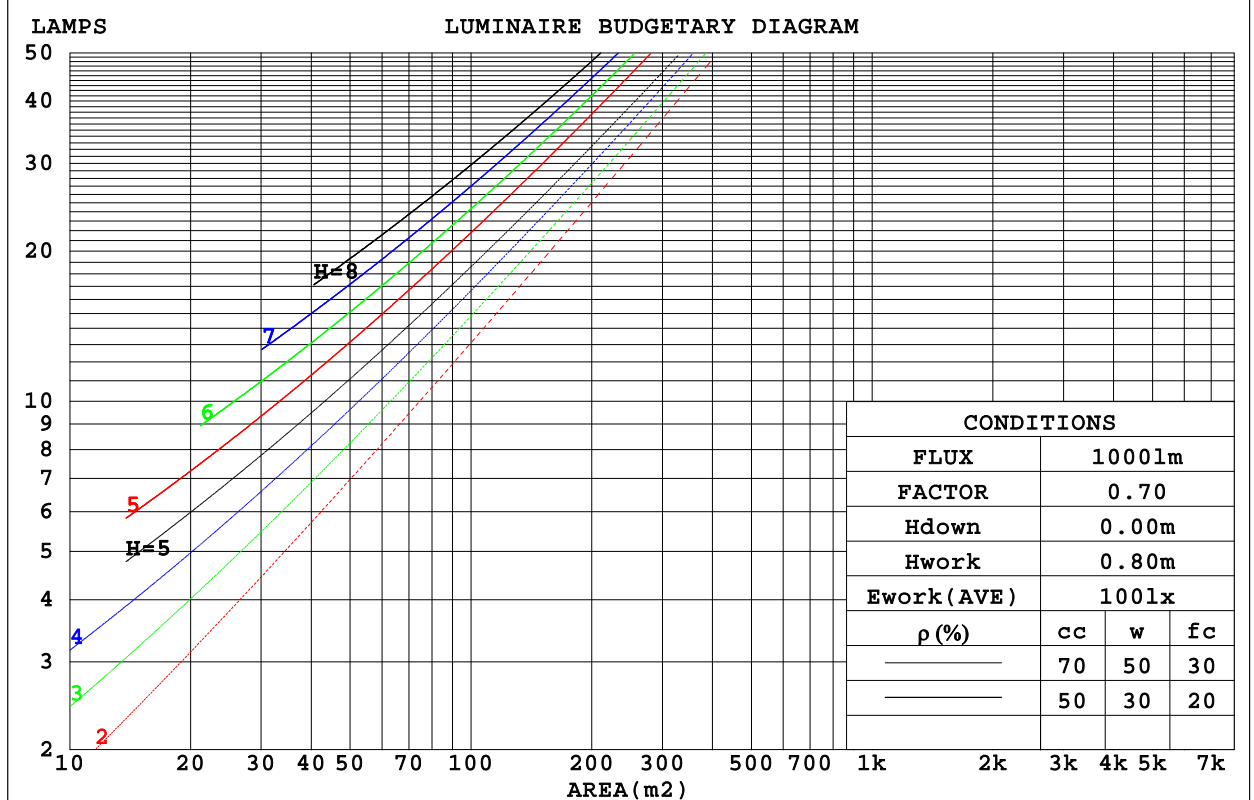
LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	10308	9831
80	16858	15888
75	23995	22297
70	32090	29374
65	41602	37535
60	52816	46549
55	67072	57777
50	85659	71448
45	105040	88297

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	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	1.07	1.04	1.01	1.05	1.02	.99	1.01	.99	.96	.97	.95	.93	.94	.92	.91	.89
2.0	.96	.91	.86	.95	.90	.85	.91	.87	.83	.88	.85	.82	.85	.82	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.83	.77	.73	.80	.75	.72	.78	.74	.70	.69
4.0	.79	.71	.65	.77	.70	.65	.75	.69	.64	.73	.68	.63	.71	.66	.63	.61
5.0	.71	.64	.58	.70	.63	.58	.68	.62	.57	.66	.61	.56	.65	.60	.56	.54
6.0	.65	.57	.52	.64	.57	.51	.63	.56	.51	.61	.55	.51	.59	.54	.50	.48
7.0	.60	.52	.46	.59	.52	.46	.57	.51	.46	.56	.50	.46	.55	.49	.45	.44
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.42	.52	.46	.42	.51	.45	.41	.40
9.0	.51	.43	.38	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.47	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.39	.35	.33



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 王亮
 Test Date: 2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.600m [K=1.0000]
 Remarks:

WEC AND CCEC

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	.241	.137	.043	.234	.134	.042	.221	.127	.041	.209	.121	.039	.198	.115	.037	
2.0	.234	.128	.039	.228	.125	.039	.217	.120	.037	.206	.116	.036	.197	.111	.035	
3.0	.222	.118	.035	.217	.116	.035	.207	.112	.034	.198	.108	.033	.190	.105	.032	
4.0	.209	.109	.032	.205	.107	.032	.196	.104	.031	.188	.101	.030	.181	.098	.030	
5.0	.197	.100	.029	.193	.099	.029	.186	.097	.028	.178	.094	.028	.172	.092	.028	
6.0	.186	.093	.027	.182	.092	.026	.175	.090	.026	.169	.088	.026	.163	.086	.026	
7.0	.175	.087	.025	.172	.086	.024	.166	.084	.024	.160	.082	.024	.155	.081	.024	
8.0	.166	.081	.023	.163	.080	.023	.157	.079	.022	.152	.077	.022	.148	.076	.022	
9.0	.157	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	.141	.071	.021	
10.0	.149	.071	.020	.147	.071	.020	.142	.070	.020	.138	.069	.019	.134	.067	.019	

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	.176	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.086	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.038	.079	.049	.027	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.012	.014	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

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	26.7	28.0	26.9	28.1	28.3	26.1	27.4	26.3	27.6	27.8
3H	27.1	28.2	27.3	28.5	28.7	26.5	27.7	26.8	27.9	28.1
4H	27.1	28.3	27.4	28.5	28.8	26.6	27.7	26.9	28.0	28.2
6H	27.2	28.2	27.5	28.5	28.7	26.6	27.7	26.9	27.9	28.2
8H	27.1	28.2	27.5	28.4	28.7	26.6	27.6	26.9	27.9	28.2
12H	27.1	28.1	27.4	28.4	28.6	26.6	27.5	26.9	27.8	28.1
4H 2H	26.8	27.9	27.1	28.1	28.4	26.3	27.4	26.6	27.6	27.9
3H	27.3	28.3	27.6	28.6	28.8	26.8	27.8	27.2	28.1	28.4
4H	27.5	28.3	27.8	28.6	29.0	27.0	27.9	27.4	28.2	28.5
6H	27.5	28.3	27.9	28.6	29.0	27.1	27.8	27.5	28.2	28.5
8H	27.5	28.2	27.9	28.6	29.0	27.1	27.8	27.5	28.2	28.5
12H	27.5	28.1	27.9	28.5	28.9	27.1	27.7	27.5	28.1	28.5
8H 4H	27.4	28.2	27.8	28.5	28.9	27.0	27.7	27.4	28.1	28.5
6H	27.5	28.1	28.0	28.5	29.0	27.1	27.7	27.6	28.1	28.5
8H	27.6	28.1	28.0	28.5	29.0	27.2	27.7	27.6	28.1	28.5
12H	27.6	28.0	28.0	28.4	28.9	27.1	27.6	27.6	28.0	28.5
12H 4H	27.4	28.1	27.8	28.4	28.8	27.0	27.6	27.4	28.0	28.4
6H	27.5	28.0	28.0	28.5	28.9	27.1	27.6	27.6	28.0	28.5
8H	27.5	28.0	28.0	28.4	28.9	27.1	27.6	27.6	28.0	28.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 1.0					+ 0.8 / - 1.1				
1.5H	+ 0.6 / - 0.7					+ 0.6 / - 0.7				
2.0H	+ 1.8 / - 1.6					+ 1.5 / - 1.3				

CIE Pub.117 Corrected 13548 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.1)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

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	68	59	53	68	59	53	67	58	53	47
0.80	78	69	63	77	68	63	76	68	62	57
1.00	86	77	71	85	77	71	83	77	71	65
1.25	92	84	78	91	83	78	88	82	77	71
1.50	96	89	83	95	88	83	92	86	82	76
2.00	102	95	90	100	94	89	97	92	88	81
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	97	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	103	100	92
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: 王亮
 Test Date: 2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.600m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Conical surface Flux(90deg):

9888.9 lm

%lum = 73.0%

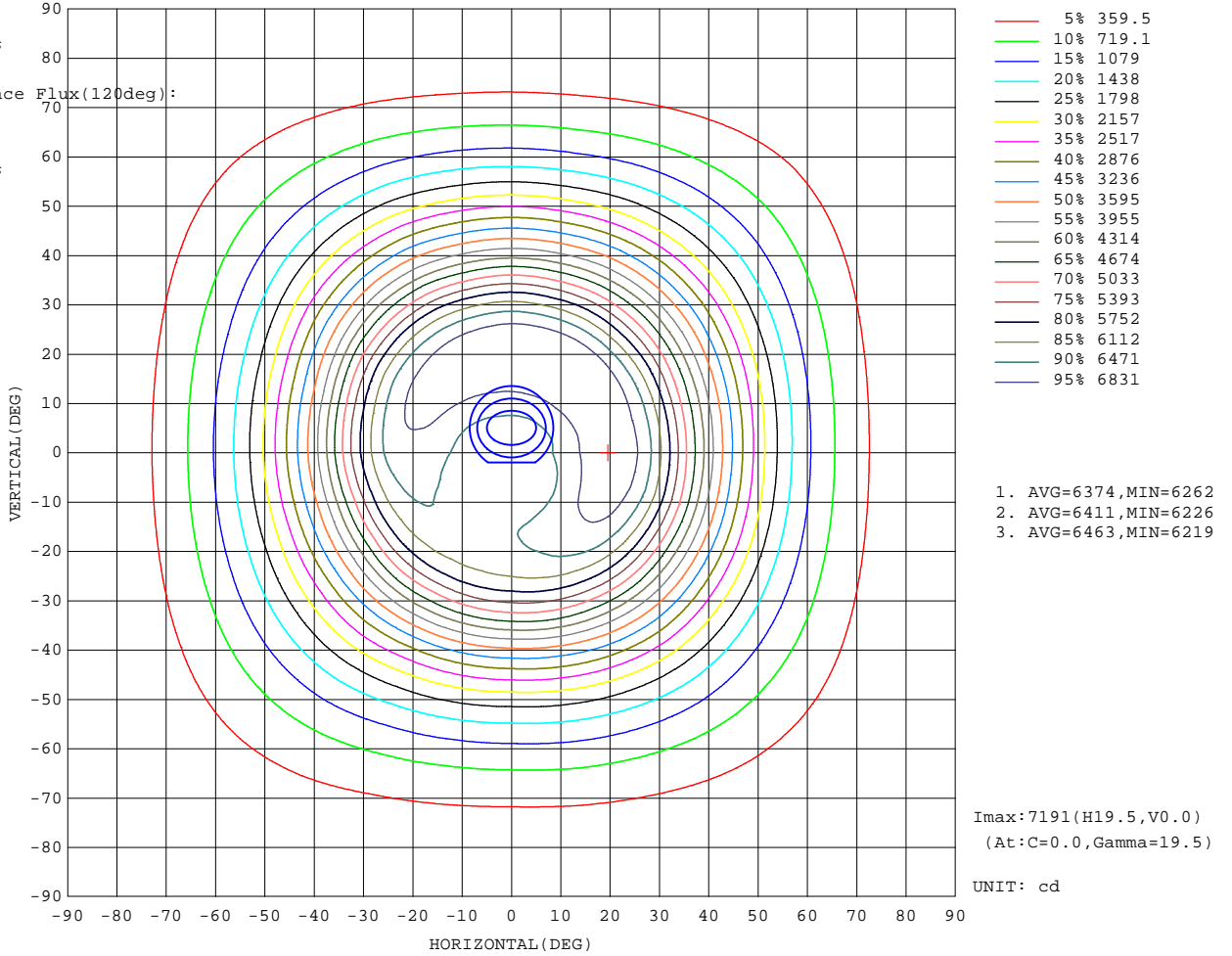
%lamp = 73.0%

Conical surface Flux(120deg):

12435 lm

%lum = 91.8%

%lamp = 91.8%

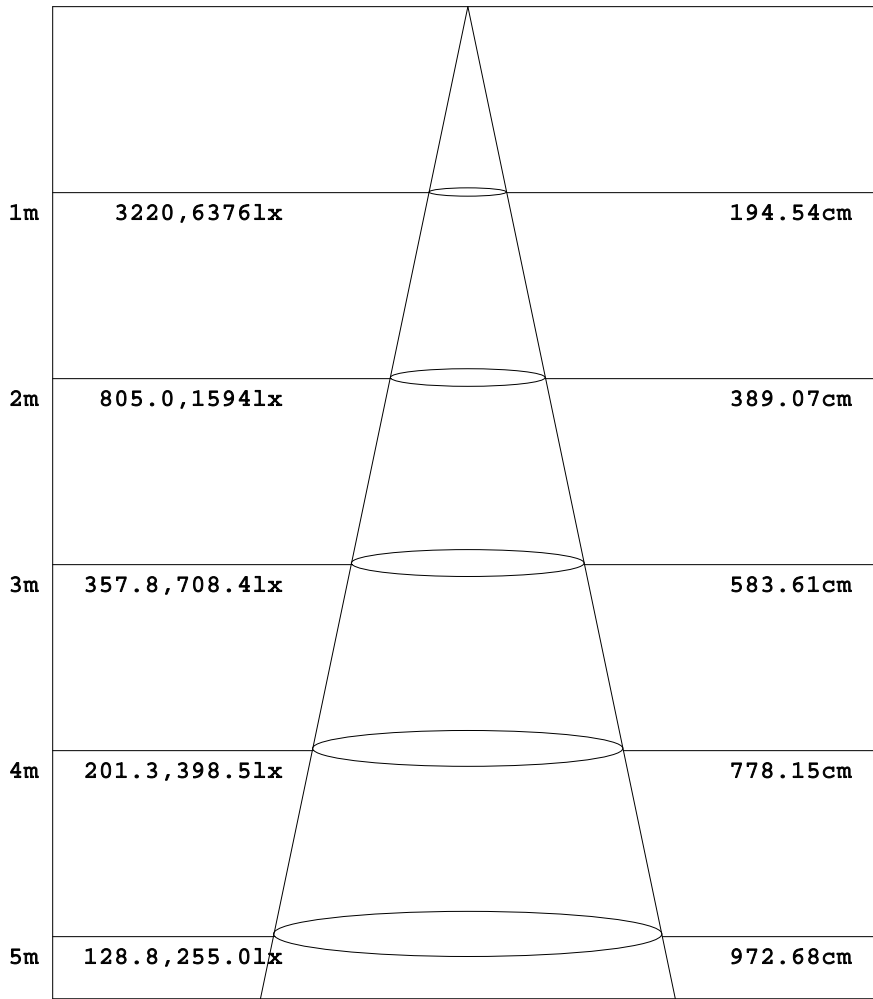


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

AAI Figure

Flux out:9769 lm



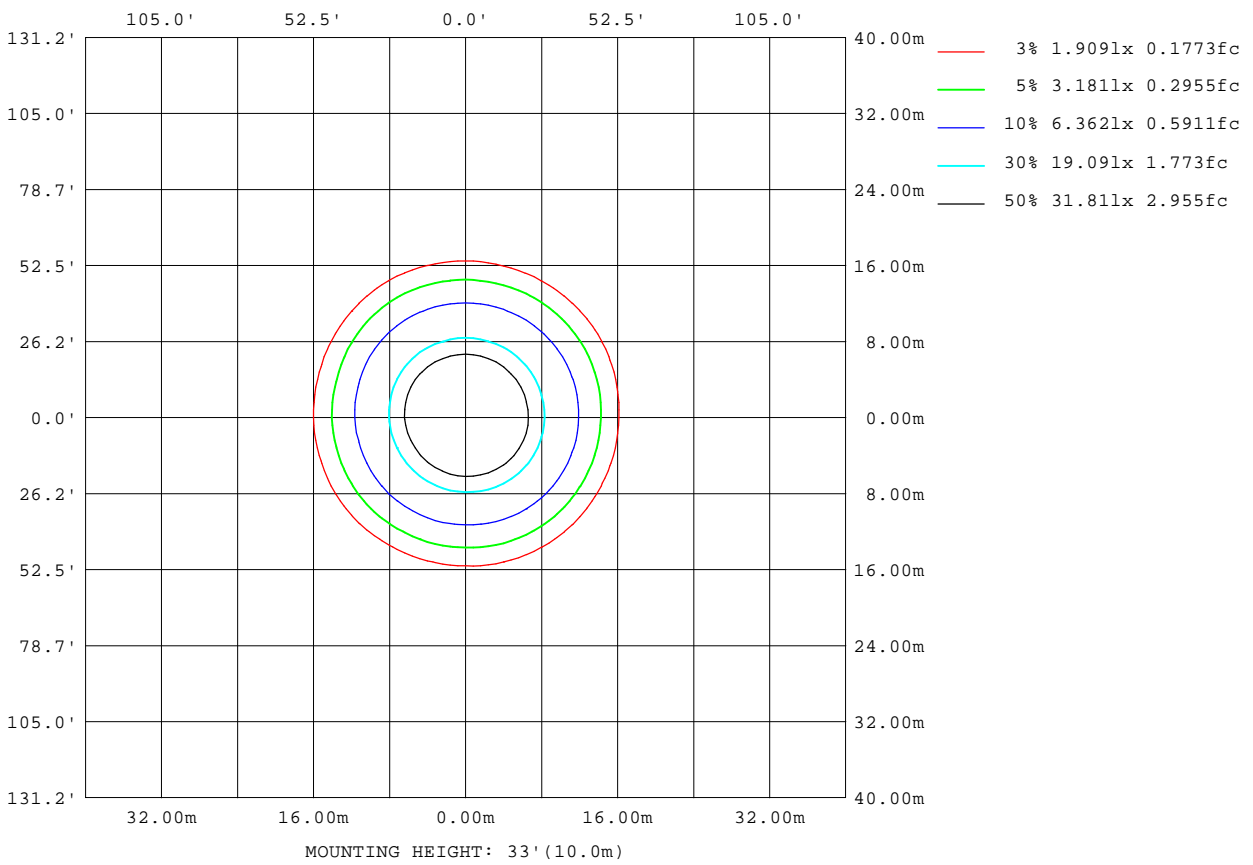
Height Eavg, Emax Angle:88.41deg Diameter

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:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 王亮
Test Date: 2020-10-29

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 10.600m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.5V I:0.4462A P:100.3W PF:0.9772 Lamp Flux:13548.3x1 lm		
NAME:	TYPE:工厂灯	WEIGHT:
SPEC.:GC51-100W-6500K	DIM.:	SERIAL No.:20201029F8
MFR.: 江苏碧松照明股份有限公司	SUR.:	Shielding Angle:

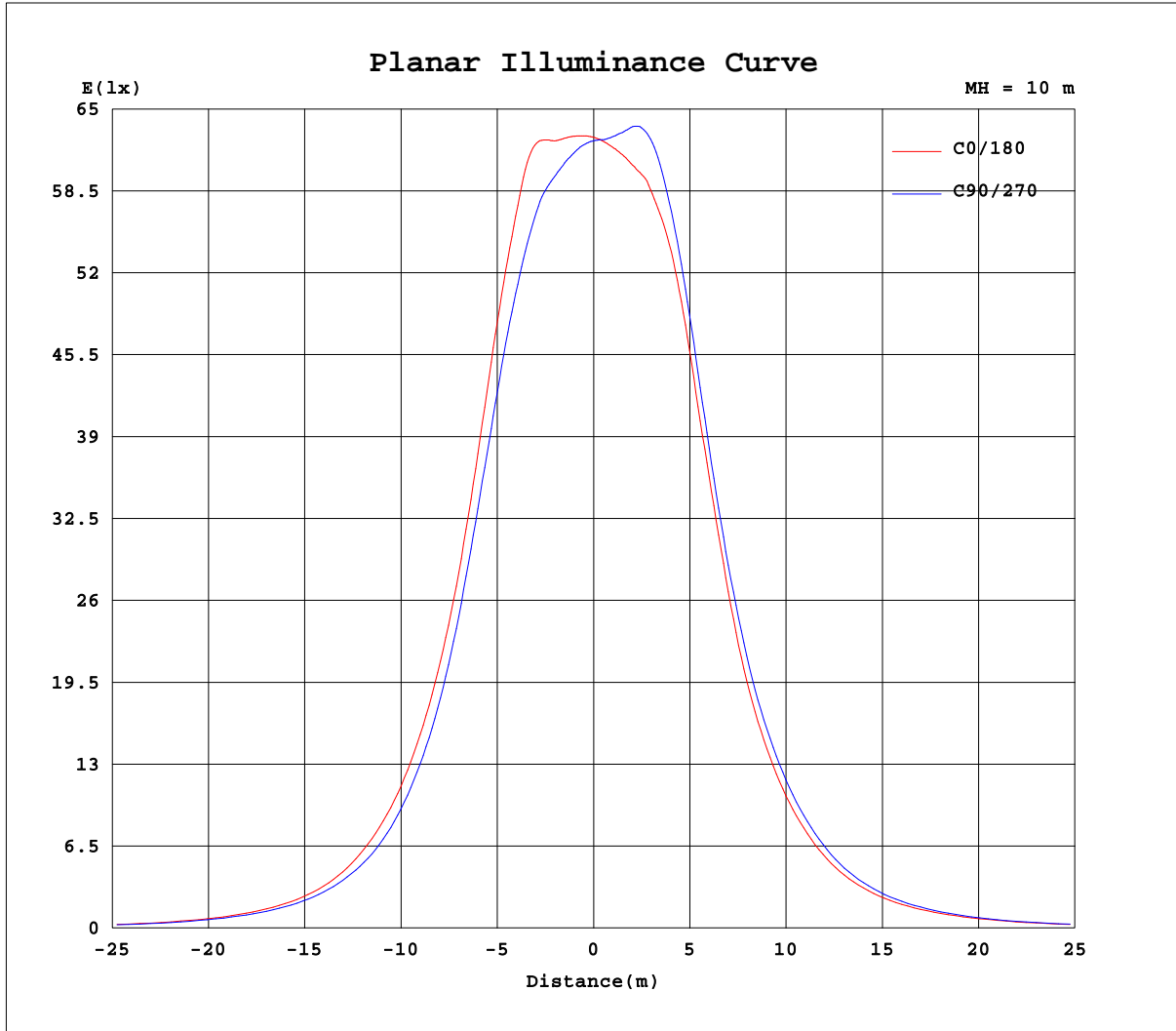
AvgL	cd/m2
L_0~180(65)av	41684
L_0~180(75)av	24549
L_0~180(85)av	10926
L_90~270(65)av	41264
L_90~270(75)av	23936
L_90~270(85)av	10745
L_45(65)av	42011
L_45(75)av	24431
L_45(85)av	10836

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 王亮
Test Date: 2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 10.600m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	6277	6271	6268	6263	6258	6254	6250	6246	6243	6240	6237	6235	6277	6271	6268	6263	6258	6254	6250
5	6361	6343	6324	6297	6278	6261	6247	6235	6230	6226	6226	6232	6283	6292	6304	6320	6331	6345	6346
10	6553	6495	6443	6388	6352	6324	6304	6286	6279	6279	6294	6319	6387	6418	6458	6520	6575	6624	6636
15	6940	6858	6758	6649	6562	6490	6441	6399	6378	6378	6415	6482	6603	6681	6772	6878	6947	6997	7018
20	7183	7115	6970	6787	6613	6489	6404	6368	6368	6403	6482	6581	6733	6847	6946	7035	7111	7156	7175
25	6888	6836	6712	6552	6365	6231	6119	6085	6085	6134	6222	6353	6559	6675	6774	6838	6892	6920	6952
30	6176	6141	5984	5842	5682	5564	5464	5431	5416	5468	5529	5652	5858	5951	6117	6188	6223	6216	6239
35	5138	5119	4991	4881	4727	4625	4508	4472	4454	4494	4510	4636	4859	4975	5144	5201	5242	5215	5241
40	4126	4072	3969	3883	3758	3632	3531	3521	3513	3556	3578	3663	3821	3898	4078	4183	4212	4191	4211
45	3194	3141	3056	2995	2879	2772	2685	2671	2659	2727	2746	2837	2972	3041	3186	3274	3327	3299	3322
50	2368	2323	2242	2194	2109	2037	1975	1978	1983	2043	2064	2105	2206	2268	2398	2465	2513	2493	2504
55	1654	1619	1583	1561	1513	1472	1425	1428	1433	1488	1510	1526	1579	1607	1694	1766	1812	1787	1787
60	1136	1116	1087	1080	1055	1036	1001	999	1005	1049	1067	1082	1114	1128	1182	1223	1254	1244	1240
65	756	744	725	719	709	704	682	678	684	708	726	736	759	769	800	817	831	823	818
70	472	464	451	448	448	448	432	435	435	450	459	466	485	492	508	515	517	509	505
75	267	262	254	254	251	256	248	252	250	259	261	265	279	282	293	293	293	285	285
80	126	123	119	120	118	121	119	122	120	124	123	126	134	135	141	141	140	135	137
85	38.6	38.2	36.2	36.7	36.1	38.0	36.8	38.2	37.4	38.6	37.6	38.9	43.3	43.1	45.7	45.4	44.8	42.4	43.7
90	3.12	3.01	2.94	2.78	2.80	2.75	2.74	2.69	2.76	2.73	2.84	2.90	3.10	3.35	3.46	3.75	3.54	3.52	3.37

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:王亮
 Test Date:2020-10-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.600m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345													
0	6246	6243	6240	6237	6235													
5	6346	6337	6334	6325	6323													
10	6643	6631	6620	6590	6559													
15	7036	7022	6996	6960	6926													
20	7177	7169	7146	7142	7143													
25	6947	6950	6931	6908	6857													
30	6210	6224	6201	6203	6181													
35	5223	5243	5225	5217	5154													
40	4205	4238	4235	4209	4164													
45	3306	3335	3329	3315	3260													
50	2483	2497	2487	2477	2434													
55	1768	1794	1789	1779	1726													
60	1222	1235	1236	1225	1184													
65	800	810	810	813	789													
70	494	499	500	507	494													
75	279	282	281	287	278													
80	133	134	133	136	132													
85	41.9	43.0	41.8	43.1	41.6													
90	3.52	3.48	3.46	3.44	3.43													

C Range: 0 - 360DEG γ Range: 0 - 90DEG
 C Interval: 15.0DEG γ Interval: 0.5DEG
 Test Speed: HIGH Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Temperature: 25.3DEG Humidity: 65.0%
 Operators: 王亮 Test Distance: 10.600m [K=1.0000]
 Test Date: 2020-10-29 Remarks: