

## GONIOPHOTOMETERS SYSTEM TEST REPORT

---

### LED Downlight TAKEO Series LE- T100-9W-830-30

---



Light Output Ratio:	100.0%	
Luminaire Power:	8.84 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.50	fine grid method.

---

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Meng Yongjian  
Test Date: 2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity: 52%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

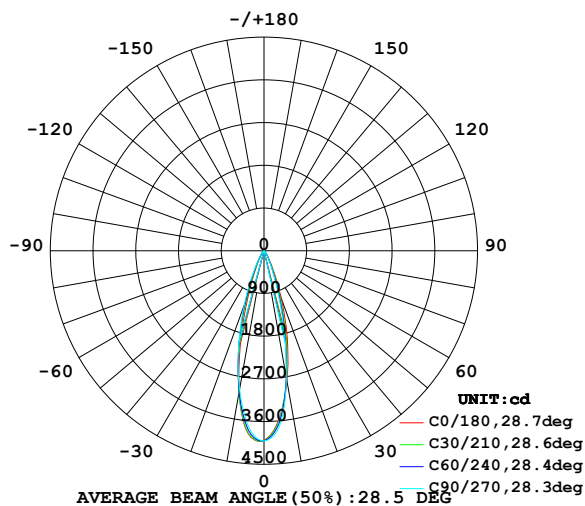
# GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINAIRE PHOTOMETRIC TEST REPORT

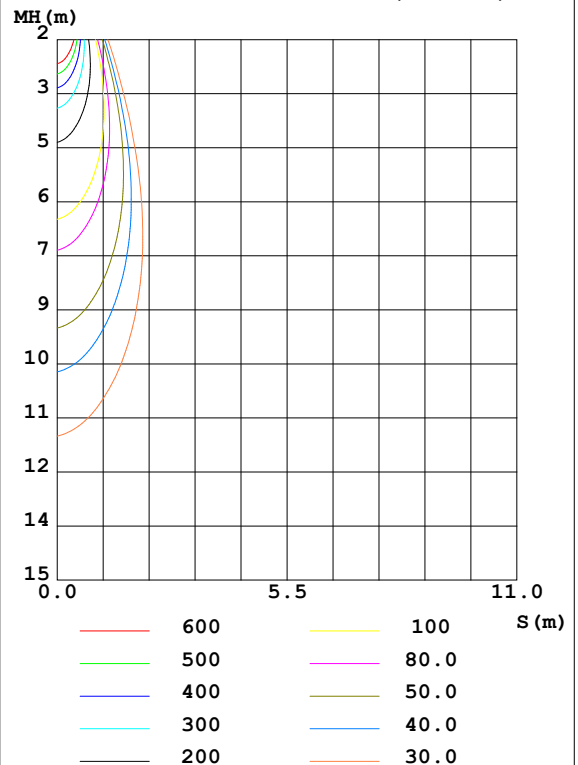
Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 110mm*H79mm	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 131.94 lm/W			
MODEL	CITIZEN-3000K	I <sub>max</sub> (cd)	4024	S/MH (C0/180)	0.47
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	0.51
RATED VOLTAGE (V)	36	TOTAL FLUX (lm)	1166.3	$\eta$ UP, DN (C0-180)	0.0, 46.1
NOMINAL FLUX (lm)	1166.32	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 53.9
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	34	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.50

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: Meng Yongjian  
 Test Date: 2018-01-19

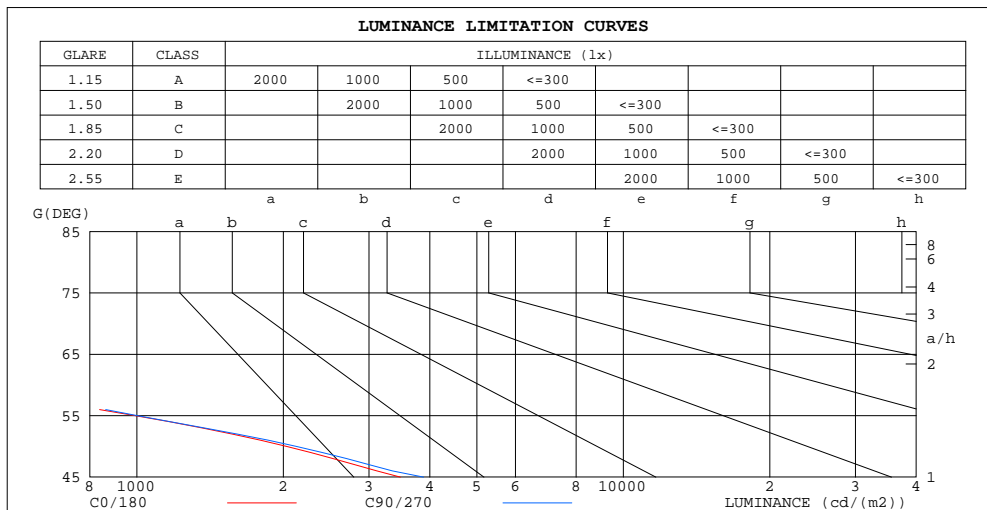
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity: 52%  
 Test Distance: 5.850m [K=1.0000]  
 Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	2789	2742	2717	2866	3020	3003	2968	2895	0- 10	327.9	327.9	28.1,28.1
20	1067	867.0	756.3	755.2	907.6	1083	1222	1210	10- 20	501.0	828.9	71.1,71.1
30	231.7	200.8	182.8	190.0	210.5	239.4	274.4	269.7	20- 30	227.6	1056	90.6,90.6
40	59.04	57.12	57.00	60.26	64.37	68.01	72.48	69.35	30- 40	76.68	1133	97.2,97.2
50	12.40	13.46	12.99	14.80	16.89	16.53	13.96	13.15	40- 50	24.45	1158	99.3,99.3
60	2.559	3.124	2.806	2.910	3.477	3.672	2.769	2.433	50- 60	6.322	1164	99.8,99.8
70	0.8538	1.005	0.8233	0.9086	1.179	1.234	0.8122	0.7507	60- 70	1.767	1166	99.9,99.9
80	0.1994	0.1790	0.1338	0.1768	0.3011	0.2585	0.1264	0.1424	70- 80	0.5287	1166	100,100
90	0.0394	0.0372	0.0459	0.0415	0.0262	0.0284	0.0284	0.0219	80- 90	0.0805	1166	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:Meng Yongjian  
 Test Date:2018-01-19

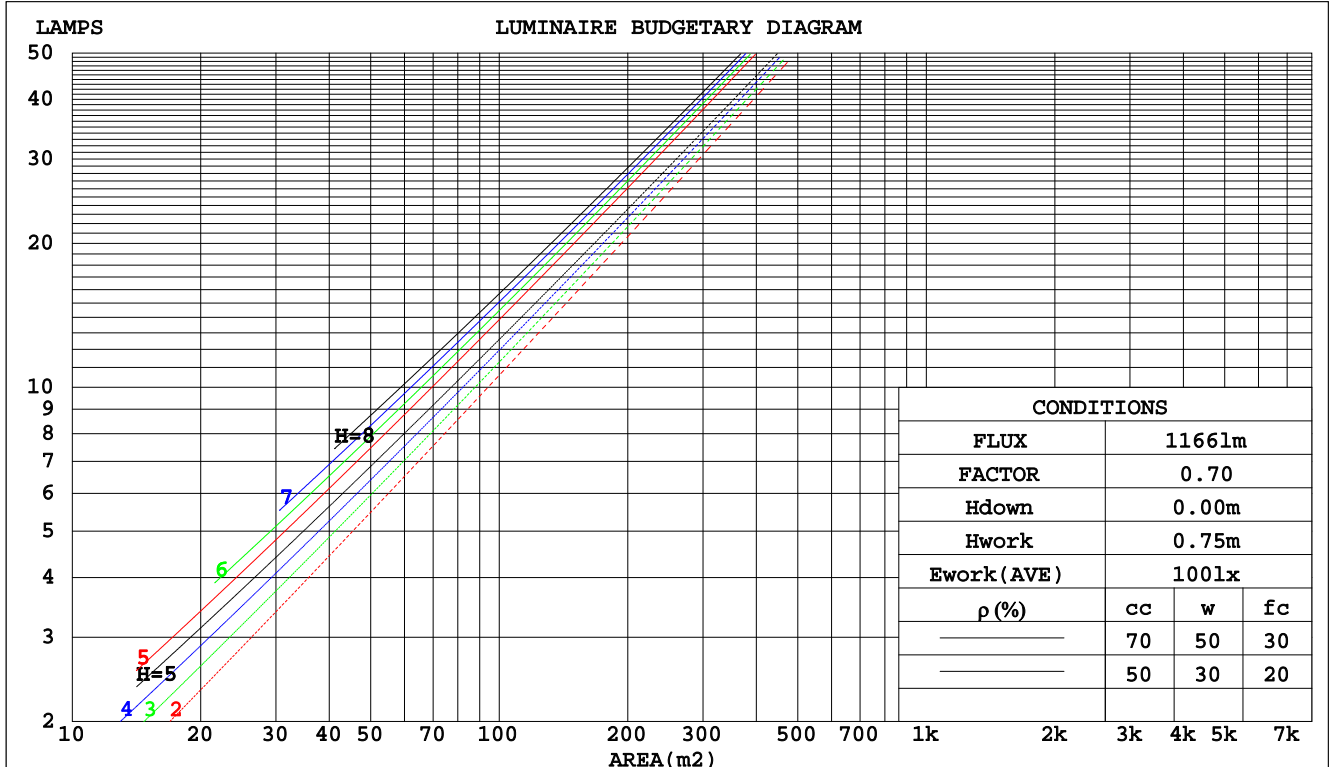
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 110mm*H79mm	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	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	1.10	1.09	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.99	.98	.98	.96
2.0	1.07	1.03	1.01	1.05	1.02	.00	1.02	.99	.97	.99	.97	.95	.96	.95	.93	.92
3.0	1.01	.98	.94	1.00	.97	.94	.98	.95	.92	.95	.93	.91	.93	.91	.89	.88
4.0	.97	.93	.89	.96	.92	.89	.94	.90	.88	.92	.89	.87	.90	.88	.86	.85
5.0	.93	.88	.85	.92	.88	.85	.90	.87	.84	.89	.86	.83	.87	.85	.82	.81
6.0	.89	.84	.81	.88	.84	.81	.87	.83	.80	.86	.82	.80	.85	.82	.79	.78
7.0	.86	.81	.78	.85	.81	.78	.84	.80	.77	.83	.79	.77	.82	.79	.77	.75
8.0	.83	.78	.75	.82	.78	.75	.81	.77	.74	.80	.77	.74	.79	.76	.74	.73
9.0	.80	.75	.72	.79	.75	.72	.78	.75	.72	.78	.74	.72	.77	.74	.71	.70
10.0	.77	.73	.70	.77	.72	.70	.76	.72	.69	.75	.72	.69	.75	.71	.69	.68



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Meng Yongjian  
 Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## WEC AND CCEC

Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm									
NAME: T100-9W-830-30					TYPE:Downlight			SERIAL No.:	
SPEC.:3000K					DIM.: φ110mm*H79mm				

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	.146	.083	.026	.140	.080	.025	.127	.073	.023	.116	.067	.021	.105	.061	.020	
2.0	.137	.075	.023	.131	.072	.022	.121	.067	.021	.112	.063	.020	.103	.058	.018	
3.0	.128	.068	.020	.124	.066	.020	.115	.062	.019	.107	.059	.018	.100	.055	.017	
4.0	.121	.063	.018	.117	.061	.018	.110	.058	.017	.103	.055	.017	.097	.053	.016	
5.0	.115	.058	.017	.111	.057	.017	.105	.055	.016	.099	.052	.016	.094	.050	.015	
6.0	.109	.054	.016	.106	.053	.015	.100	.051	.015	.095	.050	.015	.091	.048	.014	
7.0	.104	.051	.015	.101	.050	.014	.096	.049	.014	.092	.047	.014	.088	.046	.013	
8.0	.099	.048	.014	.097	.048	.013	.092	.046	.013	.089	.045	.013	.085	.044	.013	
9.0	.095	.046	.013	.093	.045	.013	.089	.044	.012	.085	.043	.012	.082	.042	.012	
10.0	.091	.044	.012	.089	.043	.012	.086	.042	.012	.083	.041	.012	.080	.040	.011	

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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.125	.098	.077	.107	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.115	.086	.064	.099	.074	.056	.068	.052	.040	.039	.031	.023	.013	.010	.008	
6.0	.107	.076	.054	.092	.066	.047	.063	.046	.033	.037	.027	.020	.012	.009	.007	
7.0	.099	.068	.046	.086	.059	.040	.059	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.093	.062	.040	.080	.053	.035	.055	.037	.025	.032	.022	.015	.010	.007	.005	
9.0	.088	.056	.035	.076	.049	.030	.052	.034	.021	.030	.020	.013	.010	.007	.004	
10.0	.083	.051	.030	.071	.045	.026	.050	.031	.019	.029	.019	.011	.009	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Meng Yongjian  
 Test Date:2018-01-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## UGR(Unified Glare Rating) Table

Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi 110\text{mm} \times H79\text{mm}$	

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	9.0	9.7	9.2	9.9	10.0	8.5	9.3	8.7	9.4	9.6
3H	8.9	9.5	9.1	9.7	9.9	8.4	9.1	8.7	9.3	9.5
4H	8.8	9.4	9.0	9.6	9.8	8.3	9.0	8.6	9.2	9.4
6H	8.7	9.3	9.0	9.5	9.8	8.3	8.8	8.5	9.1	9.3
8H	8.7	9.2	9.0	9.5	9.7	8.2	8.8	8.5	9.0	9.3
12H	8.6	9.2	8.9	9.4	9.7	8.2	8.7	8.5	9.0	9.2
4H 2H	8.8	9.4	9.1	9.6	9.8	8.3	9.0	8.6	9.2	9.4
3H	8.6	9.2	9.0	9.5	9.7	8.2	8.8	8.5	9.0	9.3
4H	8.6	9.1	8.9	9.4	9.7	8.1	8.6	8.5	8.9	9.2
6H	8.5	8.9	8.8	9.2	9.6	8.0	8.5	8.4	8.8	9.1
8H	8.4	8.8	8.8	9.2	9.5	8.0	8.4	8.4	8.7	9.1
12H	8.4	8.7	8.8	9.1	9.5	7.9	8.3	8.3	8.7	9.0
8H 4H	8.4	8.8	8.8	9.2	9.5	8.0	8.4	8.4	8.7	9.1
6H	8.3	8.7	8.7	9.0	9.5	7.9	8.2	8.3	8.6	9.0
8H	8.3	8.6	8.7	9.0	9.4	7.8	8.1	8.2	8.5	9.0
12H	8.2	8.5	8.7	8.9	9.4	7.7	8.0	8.2	8.4	8.9
12H 4H	8.4	8.7	8.8	9.1	9.5	7.9	8.3	8.3	8.7	9.0
6H	8.2	8.6	8.7	9.0	9.4	7.8	8.1	8.2	8.5	9.0
8H	8.2	8.5	8.7	8.9	9.4	7.7	8.0	8.2	8.4	8.9
Variations with the observer position at spacings:										
S = 1.0H	+ 3.3 / - 9.8					+ 2.8 / - 9.2				
1.5H	+ 5.3 / - 7.3					+ 4.6 / - 7.2				
2.0H	+ 5.1 / - 5.7					+ 5.6 / - 6.0				

CIE Pub.117 Corrected 1166 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.5)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Meng Yongjian  
Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity:52%  
Test Distance:5.850m [K=1.0000]  
Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## UTILIZATION FACTORS TABLE

Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi 110\text{mm} \times H79\text{mm}$	

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) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	80	89	84	80	89	83	80	77
0.80	97	92	88	96	91	88	95	91	88	84
1.00	101	96	92	100	95	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	95	91
1.50	107	103	100	106	102	99	104	101	98	94
2.00	109	106	103	108	105	102	105	103	100	95
2.50	111	107	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	113	112	113	112	110	109	108	107	100
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:Meng Yongjian  
 Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 110mm*H79mm	

Conical surface Flux(90deg):

1149.5 lm

%lum = 98.6%

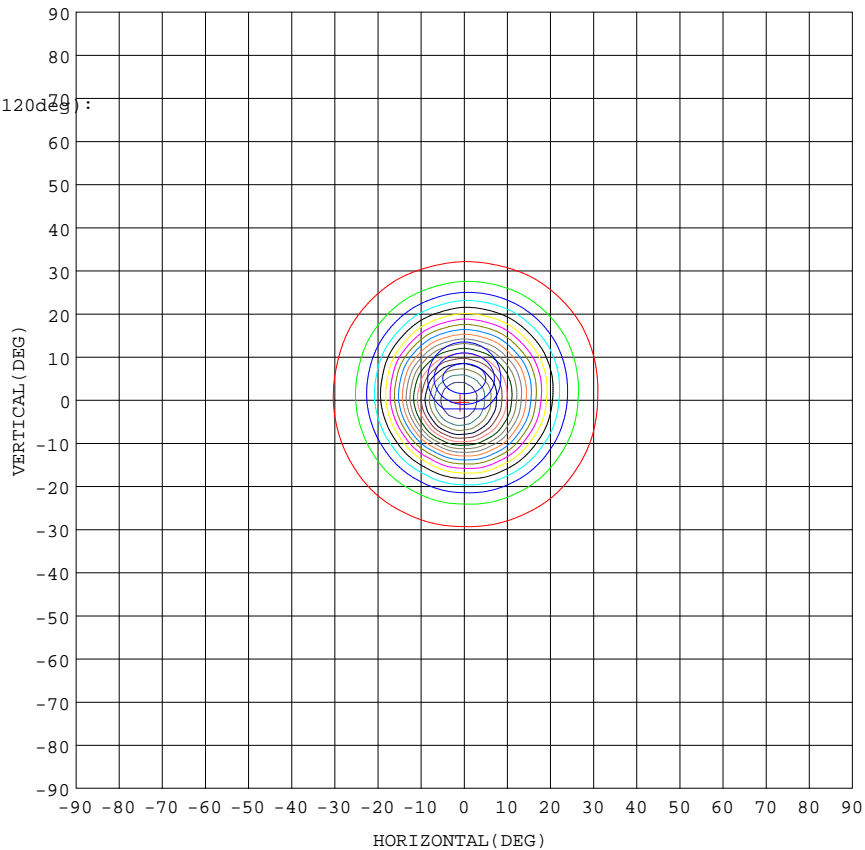
%lamp = 98.6%

Conical surface Flux(120deg):

1163.9 lm

%lum = 99.8%

%lamp = 99.8%



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Meng Yongjian  
Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity:52%  
Test Distance:5.850m [K=1.0000]  
Remarks:

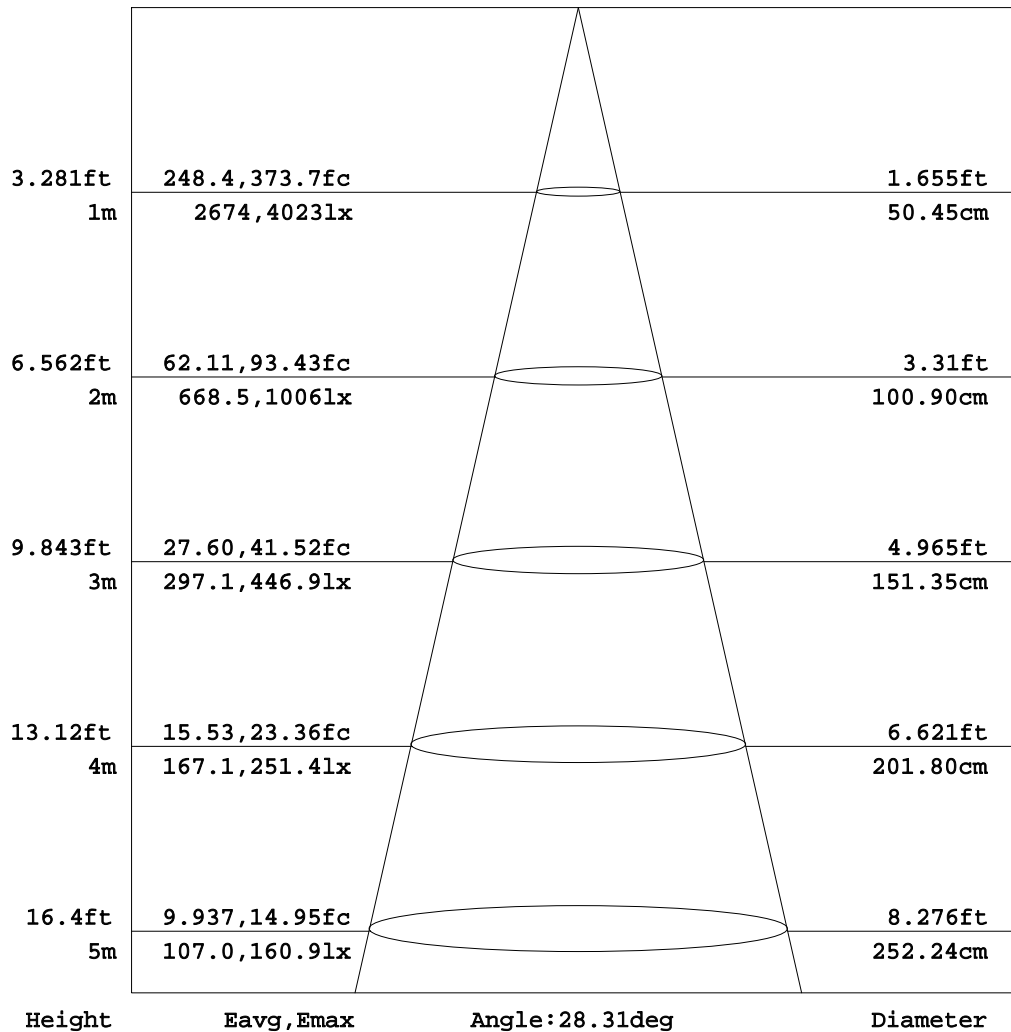


# GONIOPHOTOMETERS SYSTEM TEST REPORT

## AAI Figure

Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 110mm*H79mm	

Flux out:603.1 lm



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

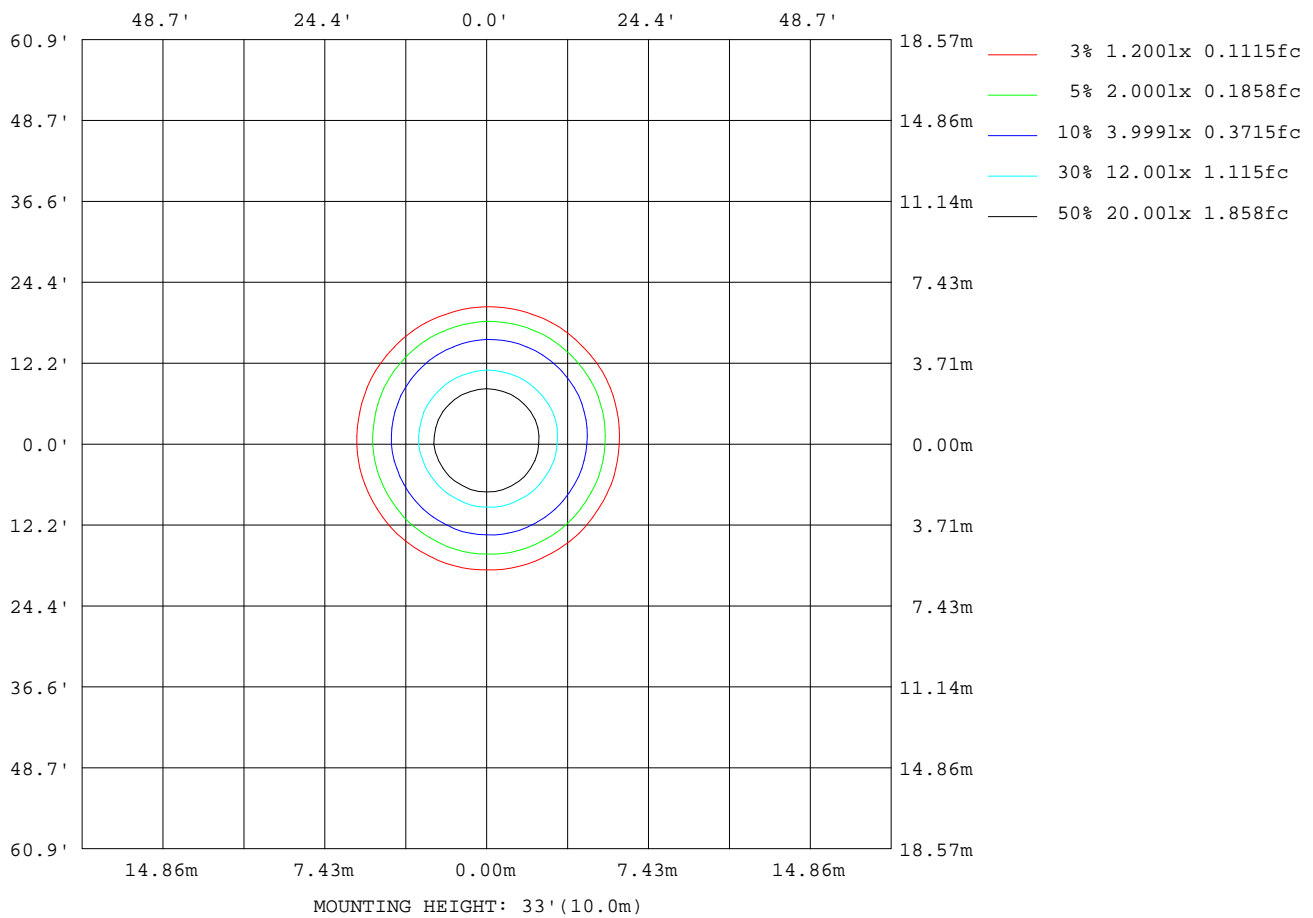
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Meng Yongjian  
Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity:52%  
Test Distance:5.850m [K=1.0000]  
Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOLUX DIAGRAM

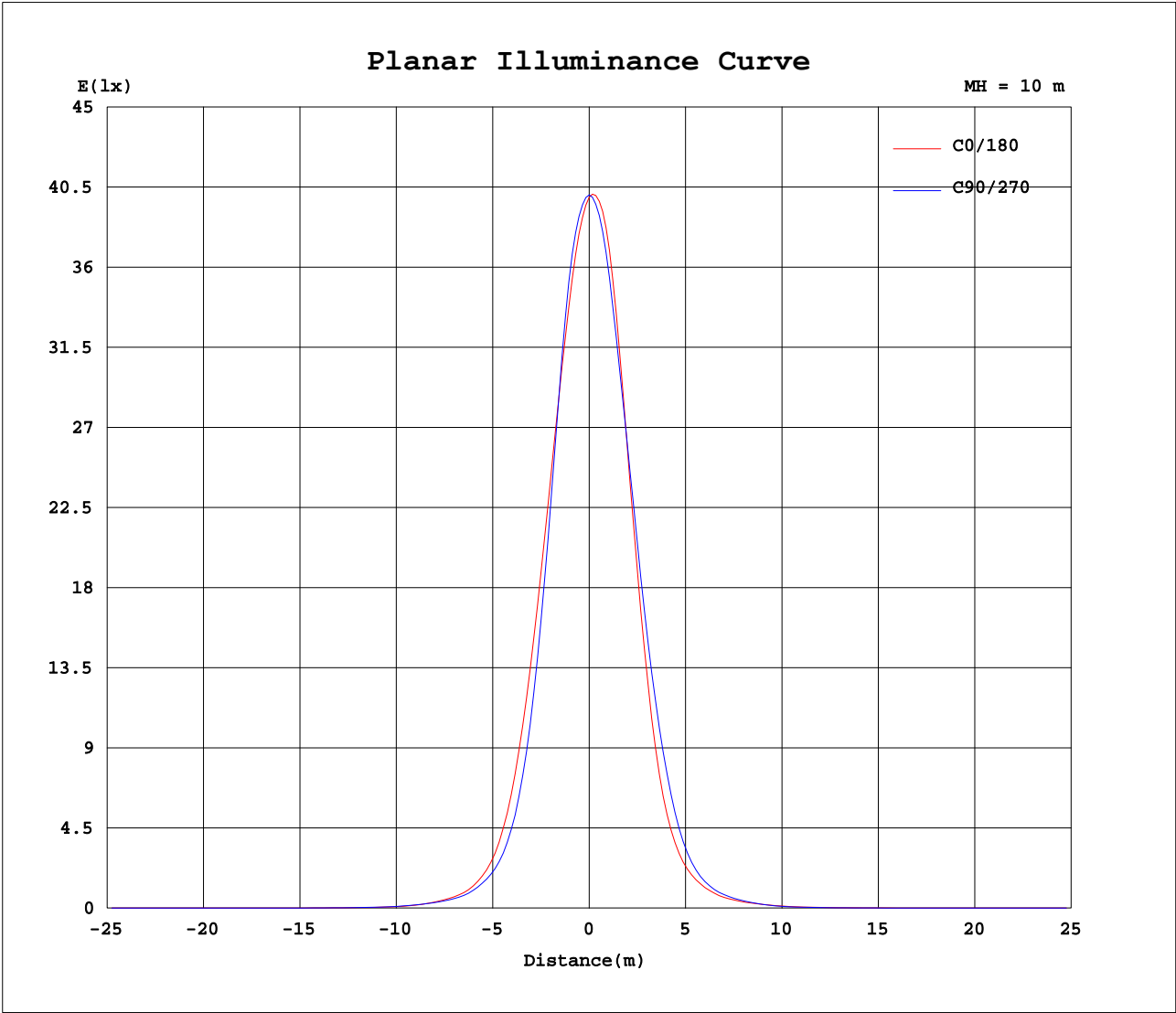
Test:U:34.00V I:0.2600A P:8.840W PF:1.000 Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 110mm*H79mm	



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Meng Yongjian  
Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity:52%  
Test Distance:5.850m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Meng Yongjian  
Test Date:2018-01-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity:52%  
Test Distance:5.850m [K=1.0000]  
Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:34.00V I:0.2600A P:8.840W PF:1.000    Lamp Flux:1166.32x1 lm		
NAME: T100-9W-830-30	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ110mm*H79mm	

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Meng Yongjian  
Test Date: 2018-01-19

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:52%
Test Distance:5.850m [K=1.0000]
Remarks:

```

[illegible][illegible]

# GONIOPHOTOMETERS SYSTEM TEST REPORT

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	3993	3999	3999	4003	4003	4006	4007	4008	4009	4008
3.0	3803	3819	3822	3848	3860	3887	3901	3930	3943	3965
6.0	3435	3457	3454	3488	3504	3558	3577	3632	3652	3698
9.0	2963	2965	2933	2947	2924	2963	2959	3027	3047	3122
12.0	2432	2407	2349	2329	2265	2260	2227	2255	2252	2335
15.0	1888	1843	1755	1714	1632	1614	1561	1566	1535	1603
18.0	1374	1315	1216	1164	1094	1072	1024	1024	997.1	1033
21.0	928.2	871.0	788.2	747.3	696.6	676.0	642.8	642.5	634.4	647.0
24.0	591.8	543.9	495.2	467.2	436.6	424.7	406.3	407.7	401.2	413.4
27.0	364.6	345.1	315.9	303.7	286.7	280.9	269.4	270.3	266.6	273.8
30.0	231.7	222.7	206.8	200.8	190.8	188.3	182.8	184.5	182.9	190.0
33.0	149.0	143.1	134.5	132.7	125.6	123.7	121.8	123.2	123.4	129.5
36.0	103.4	98.96	93.91	91.72	89.33	89.13	88.09	89.30	89.49	91.73
39.0	69.39	67.47	65.14	64.75	64.03	64.21	64.16	64.93	65.60	67.11
42.0	40.96	41.76	41.68	43.18	43.40	44.06	44.49	45.36	46.30	48.04
45.0	23.38	23.98	24.29	25.22	25.11	25.15	26.08	26.00	29.10	32.23
48.0	16.08	16.49	16.74	17.36	17.17	17.29	17.15	17.70	18.11	19.18
51.0	10.72	11.08	11.29	11.74	11.40	11.35	11.13	11.55	11.92	12.86
54.0	6.524	6.844	7.007	7.364	6.951	6.793	6.546	6.799	7.094	7.940
57.0	3.612	3.918	4.108	4.414	4.227	4.131	3.999	4.000	4.014	4.576
60.0	2.559	2.783	2.957	3.124	3.043	2.953	2.806	2.813	2.796	2.910
63.0	1.861	2.025	2.165	2.280	2.198	2.099	1.986	1.979	1.982	2.066
66.0	1.353	1.468	1.576	1.645	1.568	1.474	1.388	1.381	1.404	1.475
69.0	0.9611	1.035	1.112	1.149	1.079	0.9959	0.9416	0.9348	0.9678	1.033
72.0	0.6702	0.7032	0.7643	0.7643	0.7206	0.6529	0.6244	0.6158	0.6528	0.6988
75.0	0.4512	0.4565	0.4973	0.4870	0.4557	0.4040	0.3900	0.3822	0.4228	0.4565
78.0	0.2826	0.2751	0.3024	0.2773	0.2630	0.2139	0.2192	0.2073	0.2498	0.2751
81.0	0.1665	0.1528	0.1731	0.1396	0.1316	0.0938	0.1031	0.0916	0.1250	0.1439
84.0	0.0942	0.0742	0.0899	0.0480	0.0527	0.0415	0.0504	0.0437	0.0570	0.0524
87.0	0.0548	0.0394	0.0395	0.0372	0.0415	0.0415	0.0459	0.0437	0.0437	0.0415
90.0	0.0394	0.0394	0.0394	0.0372	0.0415	0.0415	0.0459	0.0437	0.0437	0.0415
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	4010	4008	3993	3999	3999	4003	4003	4006	4007	4008
3.0	3974	3989	3987	3983	3980	3960	3947	3920	3906	3880
6.0	3715	3748	3759	3739	3738	3691	3671	3619	3603	3558
9.0	3139	3201	3237	3214	3236	3192	3194	3143	3136	3094
12.0	2377	2466	2553	2564	2619	2608	2632	2601	2619	2586
15.0	1650	1746	1856	1903	1986	2002	2046	2036	2066	2044
18.0	1062	1142	1237	1296	1397	1426	1492	1495	1538	1527
21.0	659.9	711.4	773.4	817.1	893.8	933.6	999.7	1025	1079	1078
24.0	423.6	447.6	483.0	505.1	552.8	590.8	634.1	659.0	705.5	711.1
27.0	278.4	292.2	309.8	321.9	348.7	365.9	394.4	410.6	439.1	444.4
30.0	192.4	200.9	210.5	216.5	231.2	239.4	254.3	260.5	274.4	275.7
33.0	129.4	136.7	142.6	143.8	153.1	157.8	166.5	170.5	177.6	177.8
36.0	92.95	95.36	98.44	100.2	105.2	108.2	113.2	116.7	121.1	122.3
39.0	68.16	69.47	71.63	72.29	75.12	76.34	79.13	80.93	83.65	83.58
42.0	48.53	49.79	51.38	51.15	52.51	51.98	52.45	50.77	51.60	49.54
45.0	32.65	33.75	34.83	34.20	34.35	32.88	31.46	27.47	28.26	25.69
48.0	19.76	20.66	21.50	21.42	21.66	20.96	20.03	18.68	18.20	17.42
51.0	13.40	14.14	14.84	14.86	15.12	14.57	13.73	12.57	12.06	11.49
54.0	8.381	9.004	9.601	9.676	9.940	9.483	8.624	7.572	7.191	6.791
57.0	4.843	5.295	5.747	5.875	6.078	5.750	4.919	4.229	3.967	3.631
60.0	3.001	3.239	3.477	3.620	3.796	3.672	3.433	3.015	2.769	2.556
63.0	2.150	2.324	2.509	2.644	2.778	2.696	2.489	2.169	1.963	1.819
66.0	1.552	1.684	1.824	1.930	2.025	1.963	1.791	1.543	1.378	1.276
69.0	1.106	1.206	1.321	1.396	1.452	1.394	1.240	1.062	0.9344	0.8690
72.0	0.7687	0.8430	0.9388	0.9808	0.9999	0.9524	0.8274	0.7138	0.6156	0.5781
75.0	0.5147	0.5723	0.6442	0.6721	0.6637	0.6262	0.5327	0.4577	0.3842	0.3679
78.0	0.3286	0.3669	0.4191	0.4379	0.4125	0.3833	0.3076	0.2629	0.2094	0.2103
81.0	0.1907	0.2139	0.2487	0.2628	0.2312	0.2081	0.1439	0.1249	0.0915	0.1030
84.0	0.0987	0.0938	0.1287	0.1272	0.0979	0.0813	0.0392	0.0505	0.0284	0.0439
87.0	0.0439	0.0415	0.0632	0.0591	0.0262	0.0306	0.0284	0.0328	0.0284	0.0306
90.0	0.0415	0.0415	0.0262	0.0284	0.0262	0.0284	0.0284	0.0284	0.0284	0.0262
G/C	300.0	315.0	330.0	345.0						
0.0	4009	4008	4010	4008						
3.0	3871	3846	3842	3826						
6.0	3544	3505	3502	3475						
9.0	3092	3057	3055	3016						
12.0	2595	2564	2550	2501						
15.0	2059	2030	2027	1971						
18.0	1547	1517	1522	1468						
21.0	1092	1070	1066	1018						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Meng Yongjian

Test Date: 2018-01-19

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288

Humidity: 52%

Test Distance: 5.850m [K=1.0000]

Remarks:

## GONIOPHOTOMETERS SYSTEM TEST REPORT

### Photometric Data Table [cd]

24.0	722.3	703.0	692.7	642.4
27.0	451.2	436.5	429.3	399.0
30.0	279.0	269.7	265.2	250.1
33.0	180.1	175.0	172.3	161.7
36.0	123.8	120.8	118.7	111.8
39.0	84.20	81.56	80.13	75.10
42.0	49.20	46.33	45.65	43.02
45.0	26.00	24.87	24.65	23.94
48.0	17.39	17.03	16.92	16.48
51.0	11.55	11.38	11.37	11.01
54.0	6.912	6.943	6.999	6.724
57.0	3.670	3.829	3.840	3.700
60.0	2.507	2.433	2.472	2.495
63.0	1.771	1.740	1.764	1.804
66.0	1.243	1.234	1.256	1.300
69.0	0.8428	0.8514	0.8712	0.9149
72.0	0.5522	0.5715	0.5806	0.6262
75.0	0.3427	0.3657	0.3646	0.4095
78.0	0.1898	0.2147	0.2073	0.2518
81.0	0.0894	0.1161	0.1069	0.1424
84.0	0.0284	0.0592	0.0436	0.0767
87.0	0.0262	0.0285	0.0219	0.0460
90.0	0.0262	0.0219	0.0219	0.0306

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Meng Yongjian  
Test Date: 2018-01-19

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity: 52%  
Test Distance: 5.850m [K=1.0000]  
Remarks: