

## GONIOPHOTOMETERS SYSTEM TEST REPORT

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### LED Downlight TAKEO Series LE- T200-25W-840-30

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Light Output Ratio:	100.0%	
Luminaire Power:	24.22 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

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C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Meng Yongjian  
Test Date: 2018-01-23

$\gamma$  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:

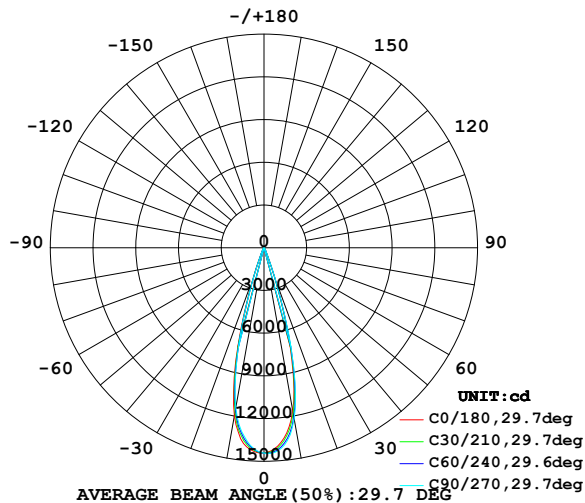
# GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINAIRE PHOTOMETRIC TEST REPORT

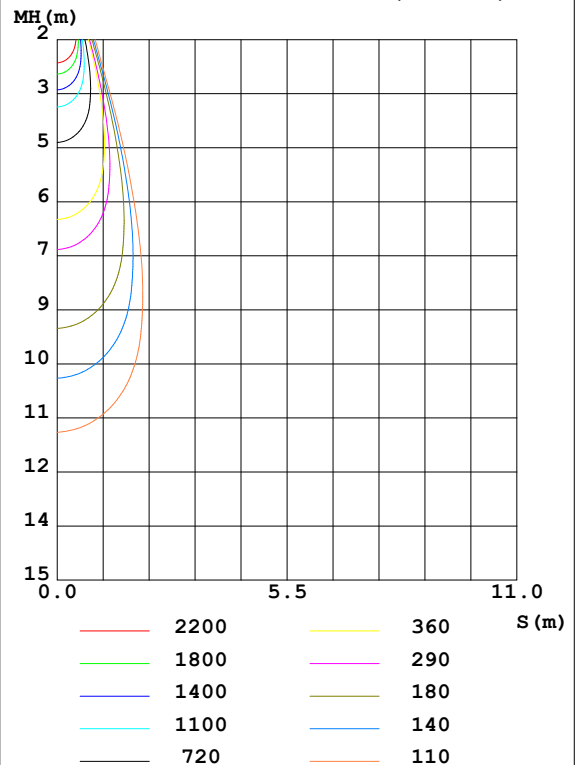
Test:U:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
NAME: T200-25W-840-30	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: $\varnothing$ 218mm*H126mm	
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 146.43 lm/W			
MODEL	CITIZEN-4000K	I <sub>max</sub> (cd)	14454	S/MH (C0/180)	0.45
NOMINAL POWER (W)	25	LOR (%)	100.0	S/MH (C90/270)	0.44
RATED VOLTAGE (V)	36	TOTAL FLUX (lm)	3546.7	$\eta$ UP,DN (C0-180)	0.0, 51.5
NOMINAL FLUX (lm)	3546.65	CIE CLASS	DIRECT	$\eta$ UP,DN (C180-360)	0.0, 48.5
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	34.6	$\eta$ down (%)	100.0	CIBSE SHR MAX	1.00

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:2018-01-23

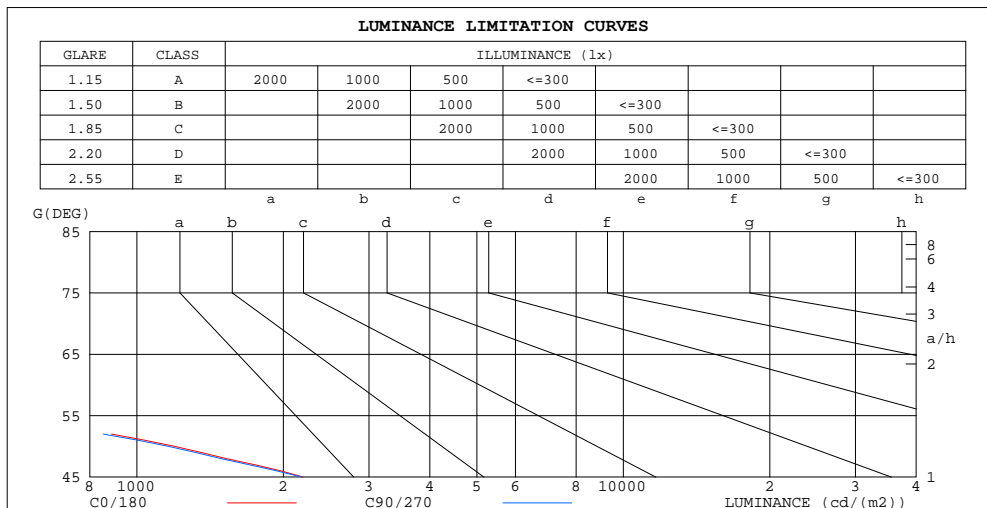
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

# 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	1164	1200	1221	1219	1198	1153	1141	1135	0- 10	1261	1261	35.5,35.5
20	205.3	219.0	220.7	217.1	206.5	184.3	186.4	191.0	10- 20	1807	3067	86.5,86.5
30	25.62	27.03	27.34	27.22	26.87	25.66	26.28	25.95	20- 30	313.6	3381	95.3,95.3
40	9.947	10.52	10.55	10.36	10.17	10.05	10.24	10.23	30- 40	104.3	3485	98.3,98.3
50	2.872	2.896	2.789	2.820	2.853	2.706	2.820	2.883	40- 50	46.06	3531	99.6,99.6
60	0.6387	0.6021	0.5774	0.6052	0.6264	0.5677	0.5918	0.6277	50- 60	11.97	3543	99.9,99.9
70	0.0941	0.0863	0.0585	0.0850	0.0935	0.0761	0.0655	0.0873	60- 70	2.982	3546	100,100
80	0.0162	0.0159	0.0149	0.0136	0.0139	0.0144	0.0157	0.0145	70- 80	0.2666	3547	100,100
90	0.0118	0.0114	0.0114	0.0112	0.0096	0.0094	0.0096	0.0094	80- 90	0.1382	3547	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: $\times 10cd$									UNIT: lm		



LUMINANCE cd/(m <sup>2</sup> )		
G(°)	C0/180	C90/270
85	45	40
80	25	23
75	17	16
70	74	46
65	197	165
60	342	310
55	556	519
50	1198	1163
45	2199	2186

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Meng Yongjian  
 Test Date: 2018-01-23

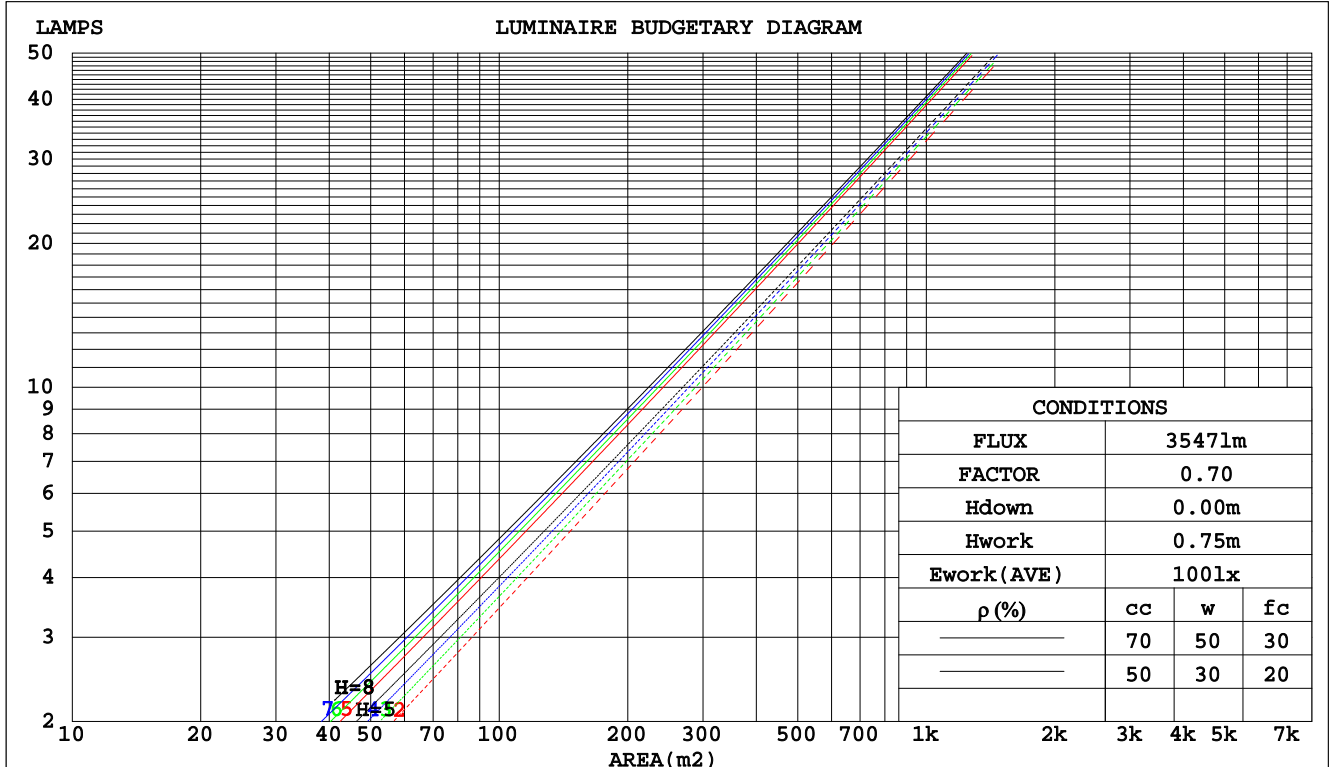
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity: 52%  
 Test Distance: 5.850m [K=1.0000]  
 Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
NAME: T200-25W-840-30	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: $\varnothing$ 218mm*H126mm	
MFR.:		

$\rho_{cc}$	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	1.13	1.11	1.10	1.11	1.09	1.08	1.07	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97
2.0	1.08	1.05	1.03	1.06	1.04	1.01	1.03	1.01	.99	1.00	.99	.97	.98	.96	.95	.94
3.0	1.04	1.00	.97	1.02	.99	.96	.00	.97	.95	.97	.95	.94	.95	.94	.92	.91
4.0	.00	.96	.93	.99	.95	.92	.97	.94	.91	.95	.92	.90	.93	.91	.89	.88
5.0	.96	.92	.89	.95	.92	.89	.94	.91	.88	.92	.90	.87	.91	.89	.87	.86
6.0	.93	.89	.86	.92	.89	.86	.91	.88	.85	.90	.87	.85	.89	.86	.84	.83
7.0	.90	.86	.83	.90	.86	.83	.89	.85	.83	.88	.85	.82	.87	.84	.82	.81
8.0	.88	.84	.81	.87	.83	.81	.86	.83	.80	.85	.82	.80	.85	.82	.80	.79
9.0	.85	.81	.79	.85	.81	.78	.84	.81	.78	.83	.80	.78	.83	.80	.78	.77
10.0	.83	.79	.76	.83	.79	.76	.82	.79	.76	.81	.78	.76	.81	.78	.76	.75



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 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
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## WEC AND CCEC

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SPEC.:4000K	DIM.: $\phi$ 218mm*H126mm	
MFR.:		

$\rho_{cc}$	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	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.134	.076	.024	.127	.073	.023	.115	.066	.021	.104	.060	.019	.093	.054	.017		
2.0	.124	.068	.021	.118	.065	.020	.108	.060	.019	.099	.055	.017	.090	.051	.016		
3.0	.115	.061	.018	.111	.059	.018	.102	.055	.017	.094	.052	.016	.087	.048	.015		
4.0	.108	.056	.016	.104	.054	.016	.097	.051	.015	.090	.048	.015	.084	.046	.014		
5.0	.101	.052	.015	.098	.050	.015	.092	.048	.014	.087	.046	.014	.081	.043	.013		
6.0	.096	.048	.014	.093	.047	.014	.088	.045	.013	.083	.043	.013	.078	.041	.012		
7.0	.091	.045	.013	.089	.044	.013	.084	.043	.012	.080	.041	.012	.076	.039	.012		
8.0	.087	.042	.012	.085	.042	.012	.081	.040	.012	.077	.039	.011	.073	.038	.011		
9.0	.083	.040	.011	.081	.039	.011	.078	.038	.011	.074	.037	.011	.071	.036	.010		
10.0	.079	.038	.011	.078	.038	.010	.075	.037	.010	.072	.036	.010	.069	.035	.010		

$\rho_{cc}$	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	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	.168	.158	.148	.144	.135	.128	.098	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.150	.133	.118	.128	.114	.102	.088	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.135	.113	.096	.115	.098	.083	.079	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.122	.098	.079	.105	.085	.069	.072	.059	.049	.042	.035	.029	.013	.011	.009	
5.0	.111	.085	.066	.096	.074	.058	.066	.052	.041	.038	.030	.024	.012	.010	.008	
6.0	.102	.075	.056	.088	.065	.049	.061	.046	.035	.035	.027	.021	.011	.009	.007	
7.0	.095	.067	.048	.081	.058	.042	.056	.041	.030	.033	.024	.018	.011	.008	.006	
8.0	.088	.060	.041	.076	.052	.036	.053	.037	.026	.031	.022	.015	.010	.007	.005	
9.0	.082	.055	.036	.071	.047	.031	.049	.033	.022	.029	.020	.013	.009	.006	.004	
10.0	.078	.050	.032	.067	.043	.028	.046	.031	.020	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
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$\gamma$  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

## UGR(Unified Glare Rating) Table

Test:U:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
NAME: T200-25W-840-30	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: $\varnothing$ 218mm*H126mm	
MFR.:		

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	4.0	4.6	4.2	4.7	4.9	4.0	4.7	4.2	4.8	4.9
3H	3.8	4.4	4.1	4.6	4.8	3.9	4.5	4.1	4.7	4.8
4H	3.8	4.3	4.0	4.5	4.7	3.8	4.4	4.1	4.6	4.8
6H	3.7	4.2	3.9	4.4	4.7	3.7	4.3	4.0	4.5	4.7
8H	3.6	4.1	3.9	4.4	4.6	3.7	4.2	4.0	4.4	4.7
12H	3.6	4.1	3.9	4.3	4.6	3.6	4.1	3.9	4.4	4.7
4H 2H	3.8	4.3	4.0	4.5	4.7	3.8	4.4	4.1	4.6	4.8
3H	3.6	4.1	3.9	4.4	4.6	3.7	4.2	4.0	4.4	4.7
4H	3.5	4.0	3.9	4.3	4.6	3.6	4.0	3.9	4.3	4.6
6H	3.4	3.8	3.8	4.2	4.5	3.5	3.9	3.8	4.2	4.5
8H	3.4	3.7	3.8	4.1	4.5	3.4	3.8	3.8	4.1	4.5
12H	3.3	3.7	3.7	4.0	4.4	3.4	3.7	3.8	4.1	4.5
8H 4H	3.4	3.7	3.8	4.1	4.5	3.4	3.8	3.8	4.1	4.5
6H	3.3	3.6	3.7	4.0	4.4	3.3	3.6	3.7	4.0	4.4
8H	3.2	3.5	3.6	3.9	4.3	3.3	3.5	3.7	3.9	4.4
12H	3.1	3.4	3.6	3.8	4.3	3.2	3.4	3.7	3.9	4.3
12H 4H	3.3	3.7	3.7	4.0	4.4	3.4	3.7	3.8	4.1	4.5
6H	3.2	3.5	3.6	3.9	4.3	3.3	3.5	3.7	3.9	4.4
8H	3.1	3.4	3.6	3.8	4.3	3.2	3.4	3.7	3.9	4.3
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / - 8.6					+ 2.6 / - 9.3				
1.5H	+ 3.6 / - 7.2					+ 4.0 / - 7.5				
2.0H	+ 5.7 / - 7.6					+ 5.8 / - 7.9				

CIE Pub.117 Corrected 3547 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.4)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
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$\gamma$  Range: 0 - 90DEG  
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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:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
NAME: T200-25W-840-30	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: $\varnothing 218\text{mm} \times H126\text{mm}$	
MFR.:		

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	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	91	88	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	107	103	100	106	102	100	104	101	99	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	107	104	102	96
3.00	113	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	112	114	112	110	110	108	107	100
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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## ISOCANDELA DIAGRAM

Test:U:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
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SPEC.:4000K	DIM.: $\phi$ 218mm*H126mm	
MFR.:		

Conical surface Flux(90deg):

3514.5 lm

%lum = 99.1%

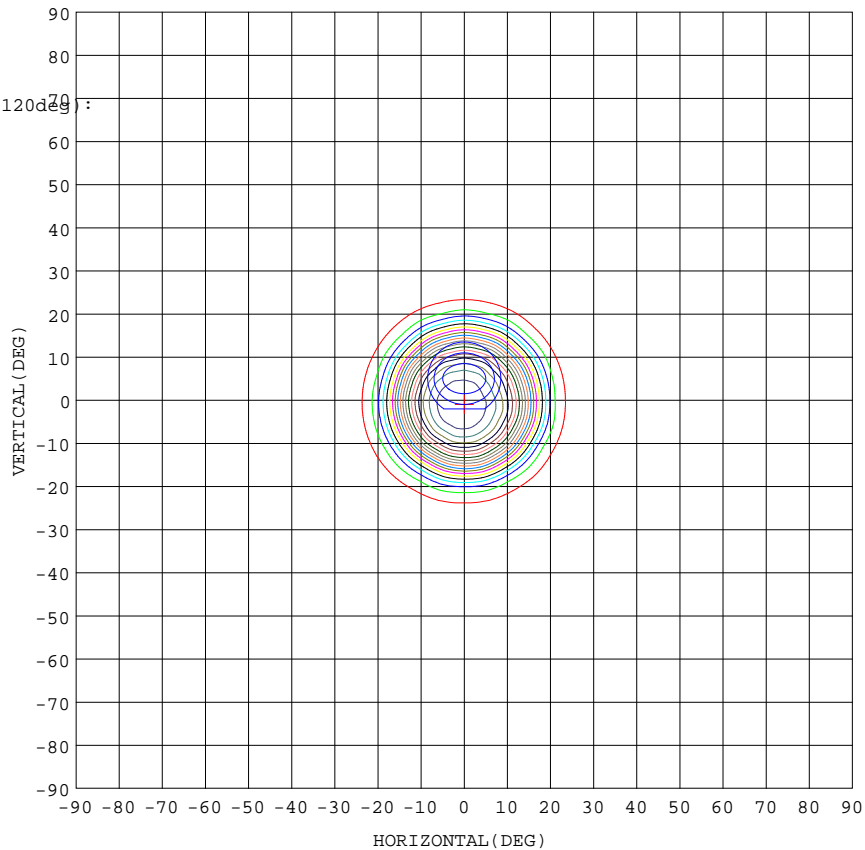
%lamp = 99.1%

Conical surface Flux(120deg):

3543.3 lm

%lum = 99.9%

%lamp = 99.9%



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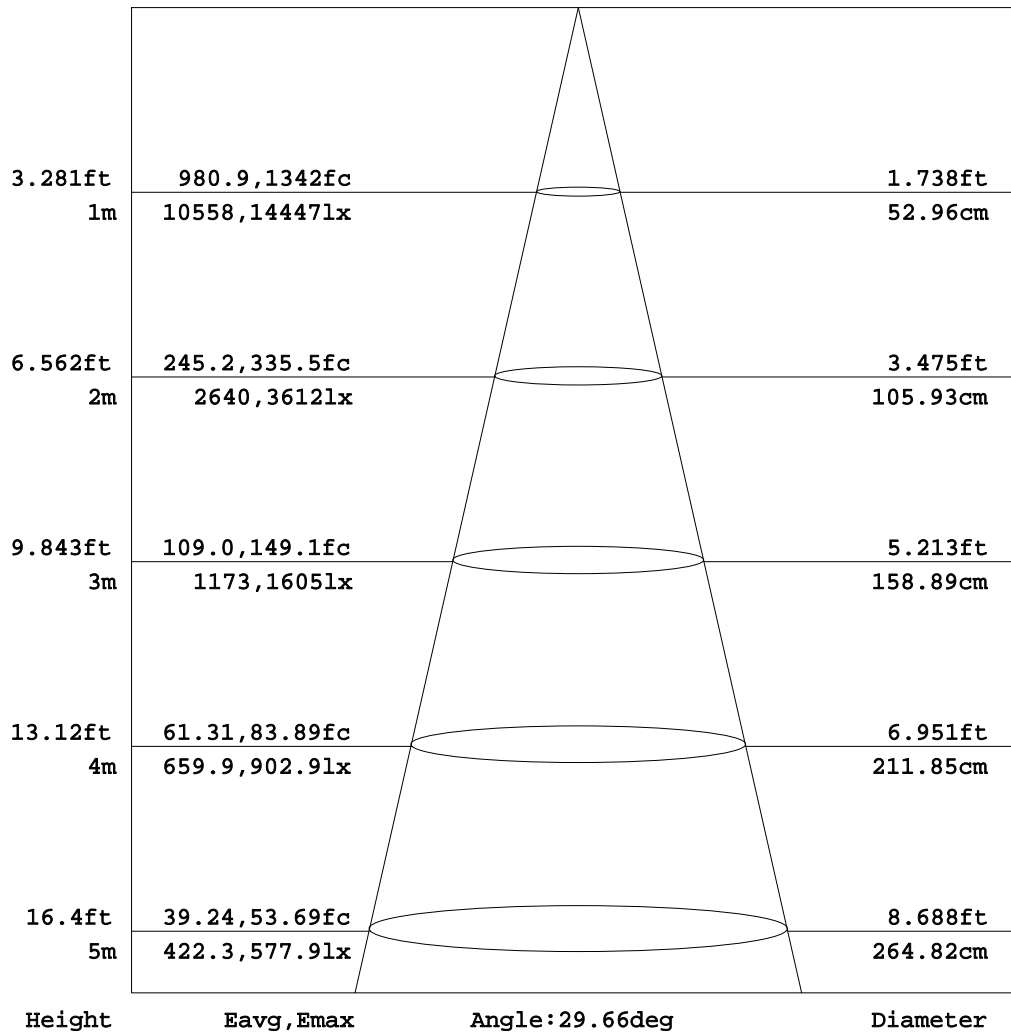


# GONIOPHOTOMETERS SYSTEM TEST REPORT

## AAI Figure

Test:U:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
NAME: T200-25W-840-30	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: $\varnothing 218\text{mm} \times \text{H}126\text{mm}$	
MFR.:		

Flux out:2382 lm



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

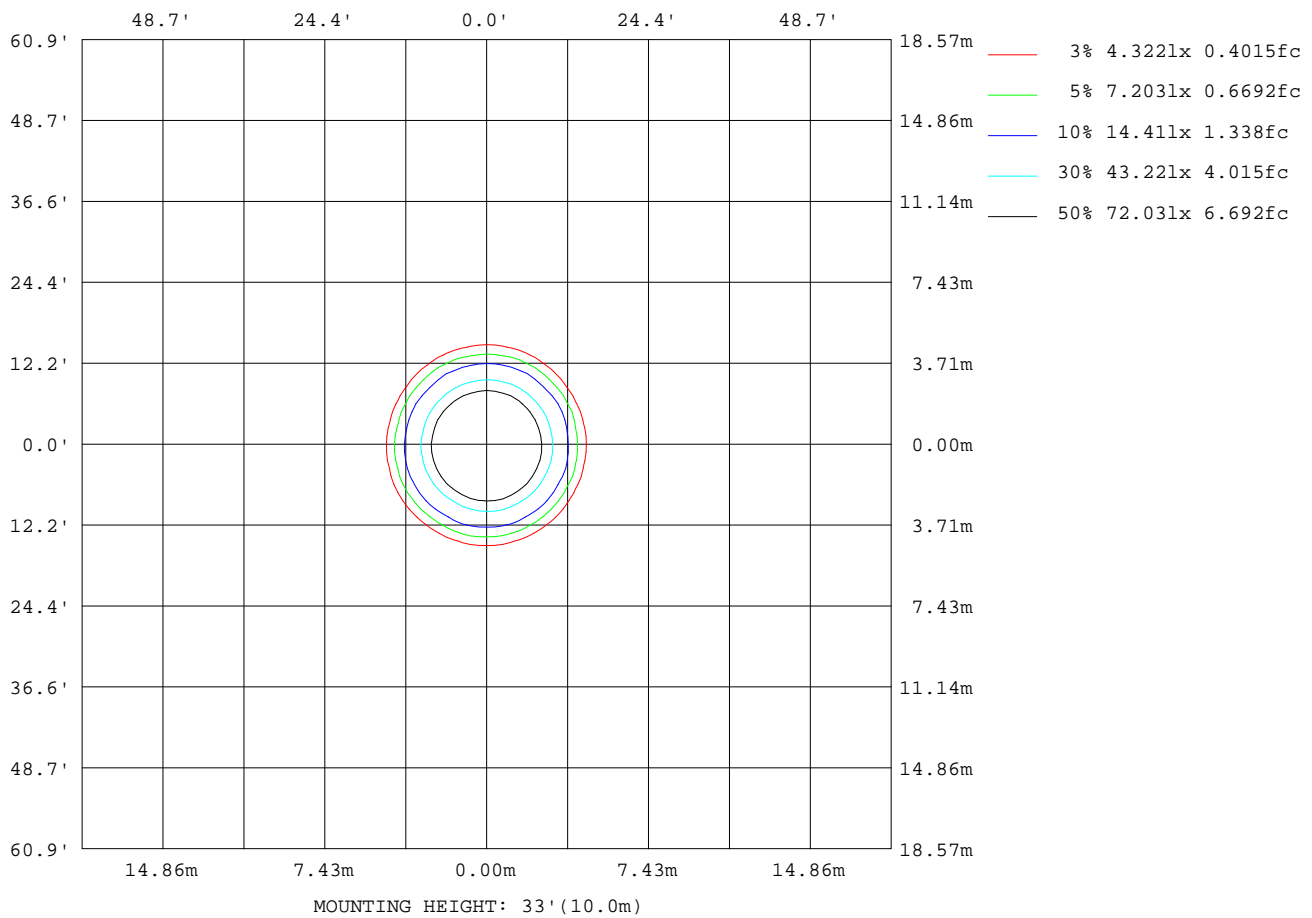
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Remarks:

# GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOLUX DIAGRAM

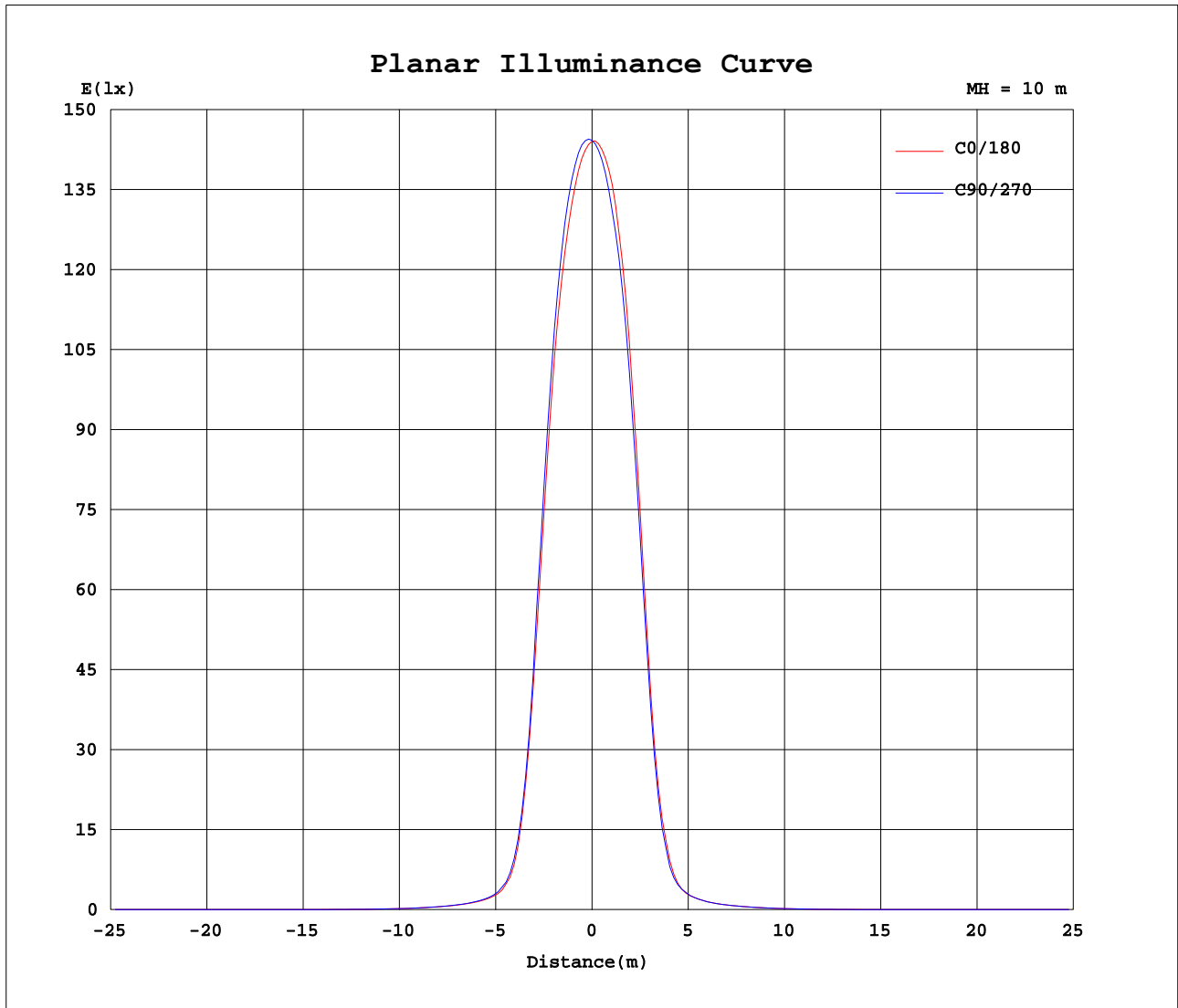
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Humidity: 52%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
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Operators: Meng Yongjian  
Test Date: 2018-01-23

$\gamma$  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:34.60V I:0.7000A P:24.22W PF:1.000 Lamp Flux:3546.65x1 lm		
NAME: T200-25W-840-30	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: φ218mm*H126mm	
MFR.:		

Table--1

UNIT:  $\times 10\text{cd}$ [illegible]

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Meng Yongjian  
Test Date: 2018-01-23

```

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:

```

UNIT:  $\times 10 \text{cd}$ 

---

```

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]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	14406	14408	14408	14408	14421	14421	14423	14417	14416	14402
3.0	14143	14194	14234	14281	14327	14379	14394	14401	14385	14381
6.0	13440	13544	13598	13707	13780	13881	13908	13939	13908	13946
9.0	12214	12415	12388	12589	12655	12809	12783	12852	12707	12793
12.0	10142	10325	10322	10508	10546	10761	10697	10729	10513	10570
15.0	7036	7235	7214	7424	7394	7645	7510	7486	7220	7292
18.0	3706	3855	3764	3928	3871	4039	3911	3922	3679	3766
21.0	1470	1637	1508	1680	1587	1735	1625	1745	1567	1694
24.0	642.6	640.5	638.5	666.4	661.2	695.4	685.4	706.3	671.7	692.9
27.0	364.6	376.3	379.7	390.6	387.3	393.1	393.2	401.5	394.8	389.6
30.0	256.2	262.7	264.6	270.3	268.5	273.2	273.4	276.3	270.5	272.2
33.0	192.3	196.8	196.7	198.5	197.7	199.6	199.0	199.6	196.6	198.6
36.0	144.3	149.8	150.6	152.9	152.1	153.3	152.7	154.1	152.4	153.8
39.0	108.6	111.9	113.5	114.7	114.7	115.8	115.5	115.0	114.5	114.7
42.0	80.91	83.85	84.96	85.74	85.04	85.93	84.56	84.17	83.61	84.29
45.0	58.01	59.70	59.41	60.27	59.05	59.22	57.66	58.06	57.19	57.83
48.0	38.08	38.51	38.02	38.40	37.66	37.92	37.17	37.58	36.75	37.35
51.0	24.33	24.78	24.32	24.52	23.81	24.05	23.57	23.82	23.51	23.97
54.0	14.17	14.18	13.72	13.78	13.33	13.38	13.27	13.30	13.25	13.62
57.0	9.168	9.081	8.799	8.729	8.571	8.646	8.510	8.595	8.517	8.753
60.0	6.387	6.329	6.078	6.021	5.851	5.901	5.774	5.866	5.822	6.052
63.0	4.258	4.192	4.020	3.947	3.816	3.807	3.714	3.781	3.786	3.965
66.0	2.590	2.548	2.441	2.373	2.225	2.176	2.094	2.144	2.194	2.367
69.0	1.279	1.294	1.213	1.180	0.9986	0.9462	0.8739	0.9309	0.9766	1.167
72.0	0.4249	0.4334	0.4117	0.3790	0.2516	0.3401	0.2030	0.1789	0.2515	0.3812
75.0	0.1684	0.1443	0.1619	0.2562	0.1531	0.2506	0.1553	0.1618	0.1553	0.1429
78.0	0.1640	0.1356	0.1574	0.1872	0.1487	0.1781	0.1509	0.1447	0.1509	0.1388
81.0	0.1575	0.1355	0.1552	0.1451	0.1487	0.1396	0.1465	0.1290	0.1487	0.1347
84.0	0.1487	0.1355	0.1465	0.1202	0.1378	0.1137	0.1378	0.1137	0.1378	0.1202
87.0	0.1378	0.1159	0.1291	0.1115	0.1203	0.1093	0.1247	0.1115	0.1203	0.1115
90.0	0.1181	0.1159	0.1137	0.1137	0.1093	0.1093	0.1137	0.1137	0.1115	0.1115
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	14377	14356	14406	14408	14408	14408	14421	14421	14423	14417
3.0	14348	14299	14303	14257	14222	14173	14159	14104	14107	14086
6.0	13923	13854	13823	13716	13634	13500	13458	13340	13317	13303
9.0	12705	12660	12592	12422	12381	12190	12192	11988	12047	12018
12.0	10438	10383	10316	10060	10068	9848	9864	9655	9760	9709
15.0	7144	7103	7031	6754	6783	6567	6600	6433	6572	6502
18.0	3686	3659	3593	3400	3425	3289	3363	3220	3344	3299
21.0	1634	1662	1607	1450	1502	1361	1462	1303	1438	1340
24.0	696.5	680.5	657.0	650.3	613.3	630.4	620.8	625.7	618.6	633.7
27.0	382.2	379.3	372.8	362.5	363.7	371.8	381.3	368.5	375.6	373.3
30.0	271.6	271.2	268.7	261.6	260.0	256.6	260.9	258.4	262.8	262.3
33.0	197.7	193.7	191.3	189.4	188.6	184.9	188.4	187.6	191.5	193.8
36.0	151.0	149.3	148.4	147.1	147.9	144.7	146.5	145.1	147.2	147.2
39.0	113.3	112.0	112.6	112.8	113.4	110.6	111.6	110.9	111.9	110.1
42.0	83.10	82.51	83.57	83.46	84.05	81.56	82.42	81.68	82.73	81.27
45.0	56.59	56.79	57.39	57.25	57.46	55.76	56.89	56.07	57.17	57.10
48.0	36.52	36.91	37.60	36.70	36.96	35.94	36.67	36.65	37.62	37.35
51.0	23.46	23.93	24.33	23.43	23.55	22.89	23.26	23.20	23.80	23.52
54.0	13.47	13.86	14.05	13.40	13.32	12.84	13.07	12.94	13.41	13.11
57.0	8.823	8.974	8.980	8.649	8.517	8.308	8.390	8.422	8.626	8.669
60.0	6.117	6.266	6.264	5.971	5.886	5.677	5.766	5.737	5.918	5.925
63.0	4.057	4.155	4.145	3.954	3.863	3.720	3.747	3.734	3.830	3.867
66.0	2.457	2.520	2.505	2.383	2.328	2.208	2.188	2.145	2.195	2.226
69.0	1.209	1.274	1.264	1.164	1.151	1.048	1.002	0.9189	0.9629	0.9540
72.0	0.4138	0.4334	0.4264	0.3978	0.3872	0.3299	0.2414	0.1964	0.3472	0.1964
75.0	0.1662	0.1465	0.1416	0.1575	0.1924	0.1509	0.1312	0.1465	0.2259	0.1465
78.0	0.1574	0.1399	0.1401	0.1533	0.1580	0.1451	0.1286	0.1454	0.1797	0.1430
81.0	0.1531	0.1352	0.1387	0.1503	0.1435	0.1429	0.1268	0.1438	0.1492	0.1378
84.0	0.1400	0.1305	0.1334	0.1473	0.1289	0.1407	0.1202	0.1421	0.1267	0.1326
87.0	0.1225	0.1137	0.1202	0.1443	0.1027	0.1226	0.1048	0.1204	0.1027	0.1182
90.0	0.1159	0.1115	0.0962	0.0984	0.0962	0.0940	0.0940	0.0962	0.0962	0.0940
G/C	300.0	315.0	330.0	345.0						
0.0	14416	14402	14377	14356						
3.0	14098	14058	14037	14045						
6.0	13322	13288	13259	13283						
9.0	12077	11958	12018	12022						
12.0	9925	9808	9910	9934						
15.0	6746	6658	6786	6844						
18.0	3494	3440	3620	3651						
21.0	1489	1385	1561	1482						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Meng Yongjian

Test Date: 2018-01-23

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	614.3	618.3	600.7	638.2
27.0	381.7	365.7	358.9	360.4
30.0	267.7	259.5	256.2	252.6
33.0	198.4	195.1	194.7	192.0
36.0	150.4	148.5	148.9	145.7
39.0	112.6	111.3	112.0	110.6
42.0	84.15	83.27	84.25	82.89
45.0	59.27	58.64	60.06	59.17
48.0	38.23	38.23	39.06	38.64
51.0	24.35	24.28	25.00	24.58
54.0	13.57	13.71	14.36	14.27
57.0	8.899	9.067	9.456	9.415
60.0	6.161	6.277	6.631	6.575
63.0	4.024	4.154	4.409	4.394
66.0	2.370	2.497	2.680	2.679
69.0	1.098	1.199	1.347	1.322
72.0	0.2761	0.3848	0.4328	0.4288
75.0	0.1290	0.1509	0.2570	0.1597
78.0	0.1262	0.1476	0.1724	0.1552
81.0	0.1234	0.1443	0.1507	0.1531
84.0	0.1159	0.1410	0.1376	0.1465
87.0	0.1005	0.1247	0.1157	0.1400
90.0	0.0918	0.0940	0.0940	0.1006

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Meng Yongjian  
Test Date: 2018-01-23

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: