

LED Downlight TAKEO Series LE-
T150-18W-840-60



Light Output Ratio:	100.0%	
Luminaire Power:	17.45 W	
SHR Nominal:	0.75	Calculated using the TM5
SHR Maximum:	0.95	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

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:

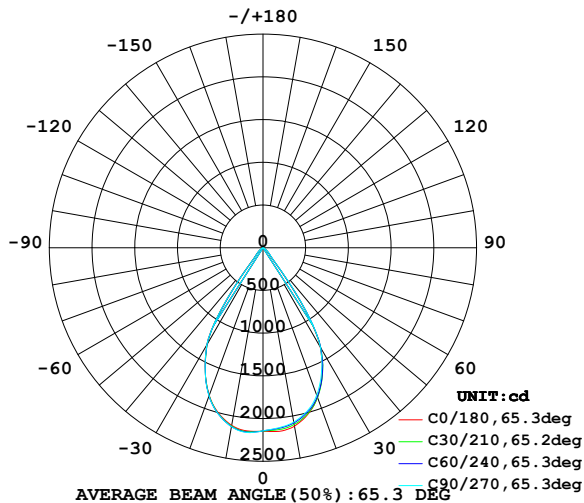
GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

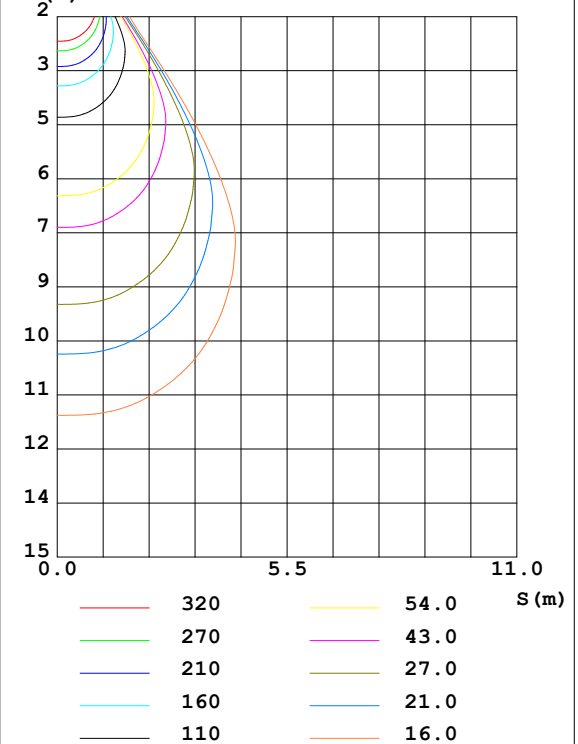
Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.63 lm/W			
MODEL	CITIZEN-4000K	I _{max} (cd)	2170	S/MH (C0/180)	0.95
NOMINAL POWER (W)	18	LOR (%)	100.0	S/MH (C90/270)	0.95
RATED VOLTAGE (V)	36	TOTAL FLUX (lm)	2087.6	η UP,DN (C0-180)	0.0, 50.4
NOMINAL FLUX (lm)	2087.58	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0, 49.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	34.9	η down (%)	100.0	CIBSE SHR MAX	0.95

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: 2018-01-24

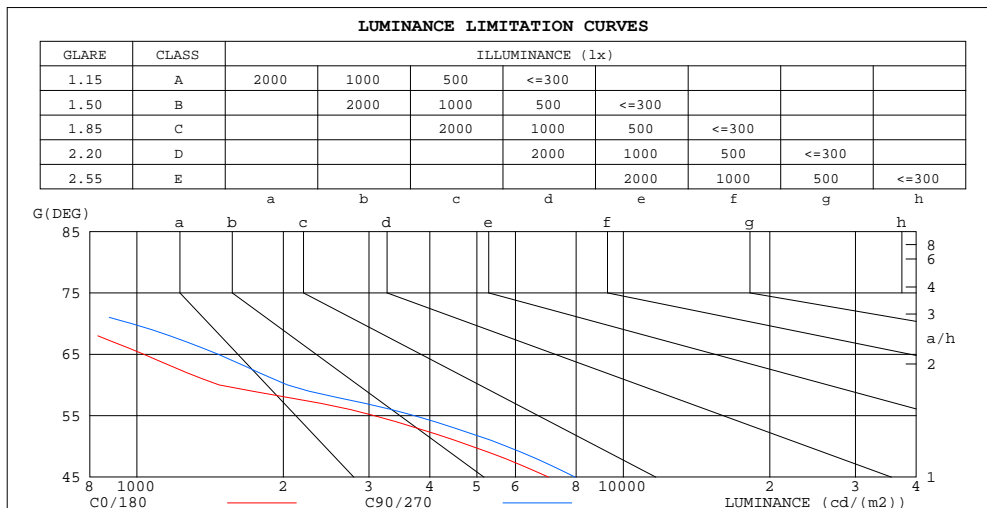
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 52%
 Test Distance: 5.850m [K=1.0000]
 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	2120	2093	2072	2082	2111	2121	2127	2125	0- 10	203.7	203.7	9.76,9.76
20	1863	1869	1839	1828	1840	1839	1847	1839	10- 20	561.6	765.3	36.7,36.7
30	1344	1368	1348	1338	1319	1299	1319	1324	20- 30	735.2	1500	71.9,71.9
40	175.4	196.0	196.0	193.7	186.7	170.6	173.2	170.8	30- 40	455.3	1956	93.7,93.7
50	63.15	72.11	74.34	70.30	67.24	64.66	65.02	61.39	40- 50	83.78	2040	97.7,97.7
60	14.83	19.36	20.49	17.93	16.63	16.14	16.97	14.20	50- 60	34.99	2075	99.4,99.4
70	4.894	6.194	6.710	5.613	5.406	5.358	5.588	4.625	60- 70	10.30	2085	99.9,99.9
80	0.3920	0.3744	0.1789	0.3723	0.5197	0.2381	0.1266	0.2224	70- 80	2.610	2087	100,100
90	0.1159	0.1115	0.1071	0.1071	0.0547	0.0590	0.0612	0.0612	80- 90	0.1245	2088	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		



LUMINANCE cd/(m2)		
G(°)	C0/180	C90/270
85	70	65
80	112	51
75	414	471
70	712	976
65	1032	1468
60	1476	2039
55	3077	3720
50	4889	5755
45	7021	7961

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Meng Yongjian
 Test Date: 2018-01-24

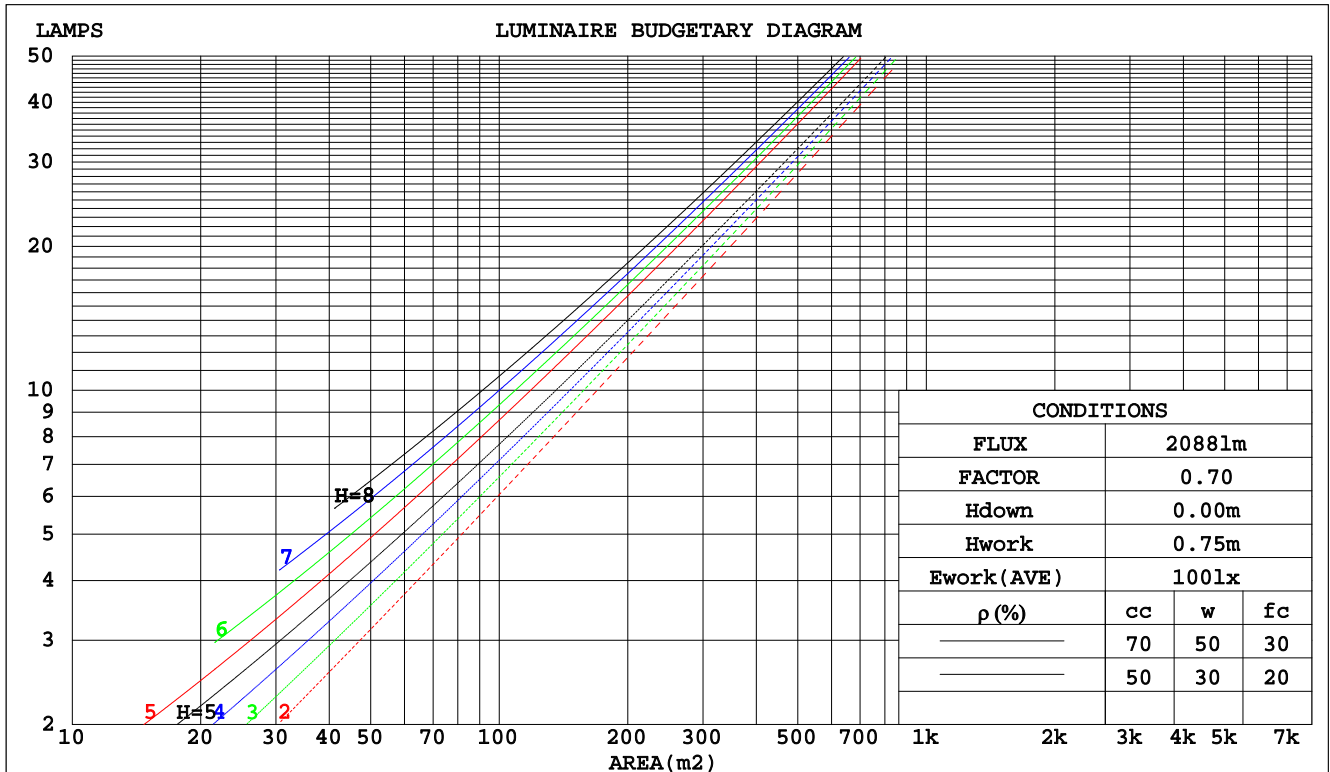
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 52%
 Test Distance: 5.850m [K=1.0000]
 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
MFR.:		

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)															
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	1.08	1.06	1.09	1.06	1.04	1.05	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.94	.98	.95	.92	.95	.93	.90	.92	.90	.89	.87
3.0	.96	.91	.87	.95	.90	.86	.92	.88	.85	.90	.86	.84	.87	.85	.82	.81
4.0	.90	.84	.80	.88	.83	.79	.86	.82	.78	.84	.81	.77	.82	.79	.77	.75
5.0	.84	.78	.74	.83	.77	.73	.81	.76	.73	.79	.75	.72	.78	.74	.71	.70
6.0	.79	.73	.68	.78	.72	.68	.76	.71	.68	.75	.71	.67	.74	.70	.67	.65
7.0	.74	.68	.64	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.66	.62	.61
8.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.57
9.0	.66	.60	.56	.65	.59	.56	.64	.59	.55	.63	.59	.55	.62	.58	.55	.54
10.0	.62	.56	.52	.62	.56	.52	.61	.56	.52	.60	.55	.52	.59	.55	.52	.50



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Meng Yongjian
 Test Date:2018-01-24

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

WEC AND CCEC

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
MFR.:		

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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.179	.102	.032	.172	.098	.031	.159	.091	.029	.148	.085	.027	.137	.079	.026		
2.0	.172	.094	.029	.166	.091	.028	.155	.086	.027	.145	.082	.026	.136	.077	.024		
3.0	.164	.087	.026	.159	.085	.026	.150	.081	.025	.141	.077	.024	.134	.074	.023		
4.0	.156	.081	.024	.152	.080	.024	.144	.076	.023	.137	.073	.022	.130	.071	.022		
5.0	.149	.076	.022	.145	.075	.022	.139	.072	.021	.132	.070	.021	.126	.067	.020		
6.0	.142	.071	.020	.139	.070	.020	.133	.068	.020	.127	.066	.019	.122	.064	.019		
7.0	.136	.067	.019	.133	.066	.019	.128	.065	.019	.123	.063	.018	.118	.061	.018		
8.0	.130	.064	.018	.128	.063	.018	.123	.061	.018	.119	.060	.017	.114	.059	.017		
9.0	.125	.060	.017	.123	.060	.017	.118	.059	.017	.114	.057	.016	.111	.056	.016		
10.0	.120	.058	.016	.118	.057	.016	.114	.056	.016	.110	.055	.016	.107	.054	.015		

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						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	.147	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.123	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.125	.087	.059	.108	.076	.052	.074	.053	.036	.043	.031	.022	.014	.010	.007	
6.0	.118	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.066	.043	.026	.039	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Meng Yongjian
 Test Date:2018-01-24

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:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm										
NAME: T150-18W-840-60					TYPE:Downlight			SERIAL No.:		
SPEC.:4000K					DIM.: ϕ 160mm*H100mm					
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	17.1	18.1	17.3	18.2	18.4	17.3	18.3	17.5	18.4	18.6
3H	17.0	17.8	17.2	18.0	18.2	17.2	18.1	17.4	18.3	18.5
4H	16.9	17.7	17.2	17.9	18.2	17.1	17.9	17.4	18.1	18.4
6H	16.8	17.6	17.1	17.8	18.1	17.0	17.8	17.3	18.0	18.3
8H	16.7	17.5	17.1	17.7	18.0	17.0	17.7	17.3	18.0	18.2
12H	16.7	17.4	17.0	17.7	18.0	16.9	17.6	17.2	17.9	18.2
4H 2H	16.9	17.7	17.2	17.9	18.2	17.1	17.9	17.4	18.1	18.4
3H	16.7	17.5	17.1	17.7	18.0	17.0	17.7	17.3	17.9	18.2
4H	16.6	17.3	17.0	17.6	17.9	16.9	17.5	17.2	17.8	18.1
6H	16.6	17.1	16.9	17.5	17.8	16.8	17.3	17.1	17.7	18.0
8H	16.5	17.0	16.9	17.4	17.8	16.7	17.2	17.1	17.6	18.0
12H	16.5	16.9	16.9	17.3	17.7	16.7	17.2	17.1	17.5	17.9
8H 4H	16.5	17.0	16.9	17.4	17.8	16.7	17.3	17.1	17.6	18.0
6H	16.4	16.8	16.8	17.2	17.6	16.6	17.1	17.1	17.4	17.9
8H	16.4	16.7	16.8	17.2	17.6	16.6	17.0	17.0	17.4	17.8
12H	16.3	16.6	16.8	17.1	17.5	16.5	16.8	17.0	17.3	17.8
12H 4H	16.5	16.9	16.9	17.3	17.7	16.7	17.2	17.1	17.5	17.9
6H	16.4	16.7	16.8	17.2	17.6	16.6	17.0	17.0	17.4	17.8
8H	16.3	16.6	16.8	17.1	17.5	16.5	16.8	17.0	17.3	17.8
Variations with the observer position at spacings:										
S = 1.0H	+ 4.3 / - 7.4					+ 4.2 / - 6.6				
1.5H	+ 6.1 / - 4.6					+ 6.0 / - 4.4				
2.0H	+ 3.8 / - 5.3					+ 3.8 / - 4.9				

CIE Pub.117 Corrected 2088 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.6)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Meng Yongjian
Test Date:2018-01-24

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

UTILIZATION FACTORS TABLE

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
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) $k(RI) \times RCR = 5$									
$k = 0.60$	88	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	99	93	90	97	93	90	86
1.25	103	98	95	102	98	94	100	97	94	90
1.50	106	101	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	106	99
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:2018-01-24

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

ISOCANDELA DIAGRAM

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
MFR.:		

Conical surface Flux(90deg):

2005.2 lm

%lum = 96.1%

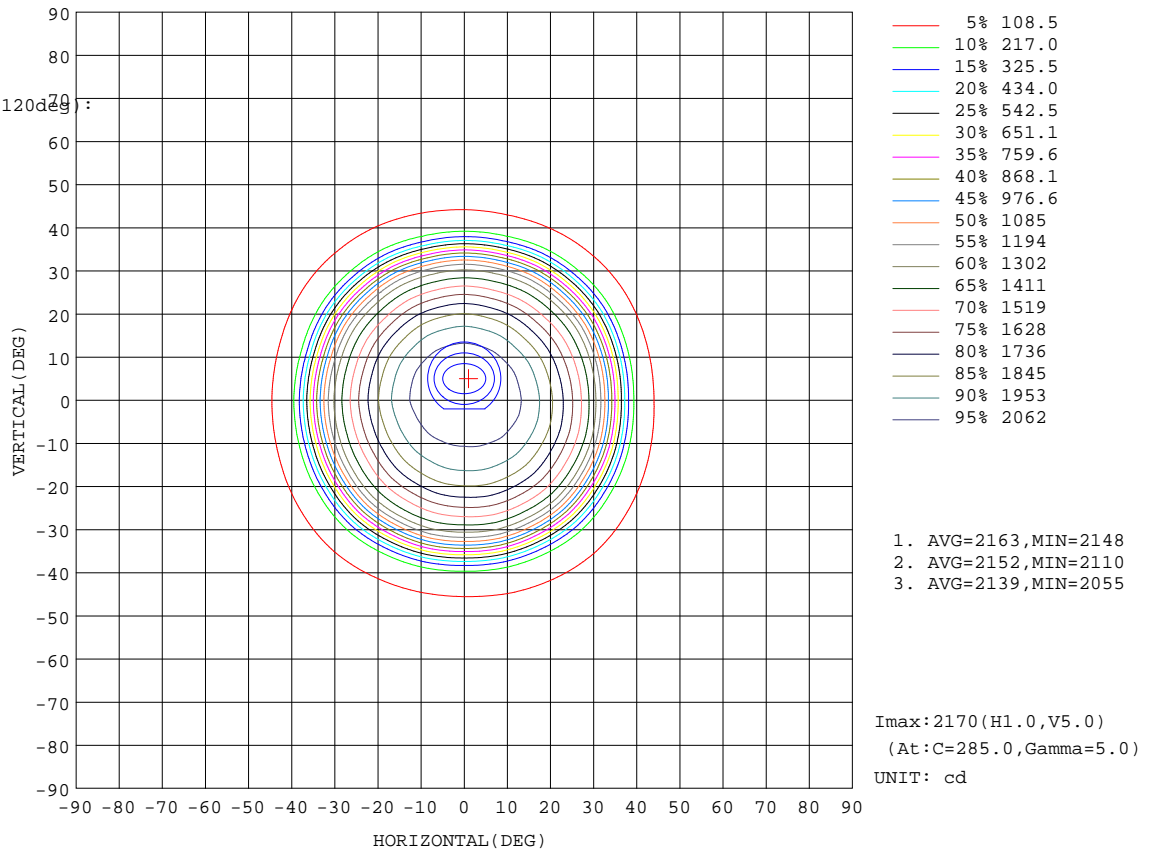
%lamp = 96.1%

Conical surface Flux(120deg):

2074.5 lm

%lum = 99.4%

%lamp = 99.4%



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

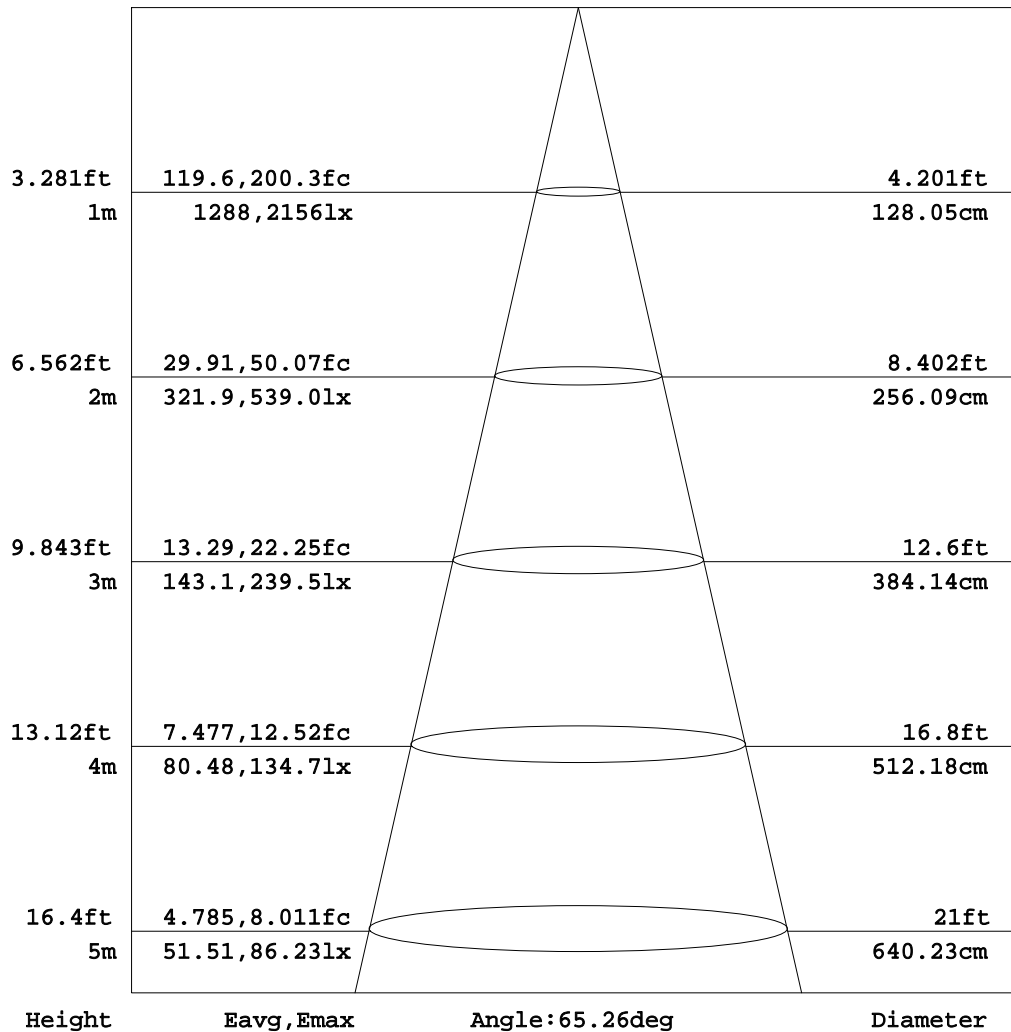
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity: 52%
Test Distance: 5.850m [K=1.0000]
Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
MFR.:		

Flux out:1706 lm



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

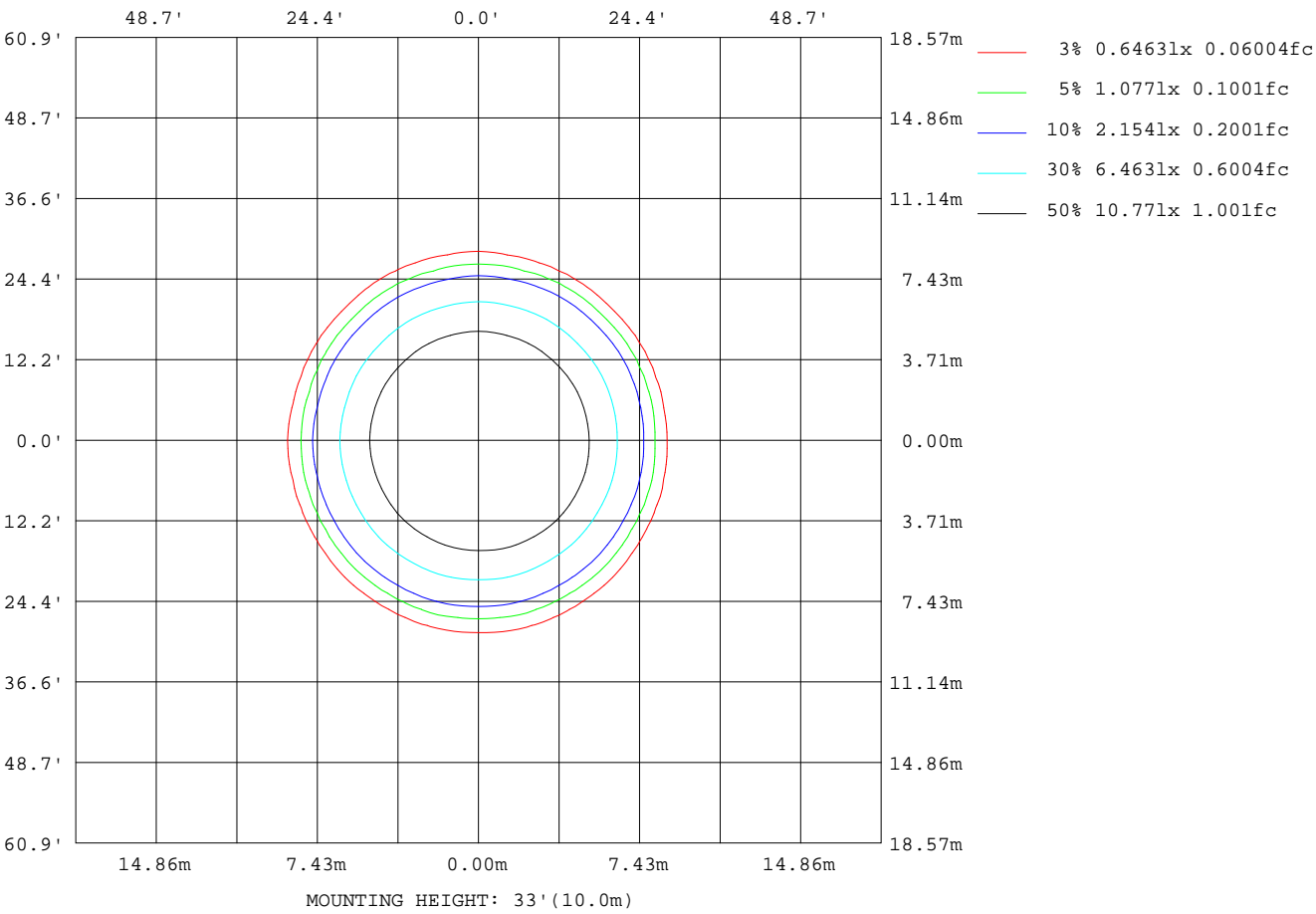
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Meng Yongjian
Test Date:2018-01-24

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

ISOLUX DIAGRAM

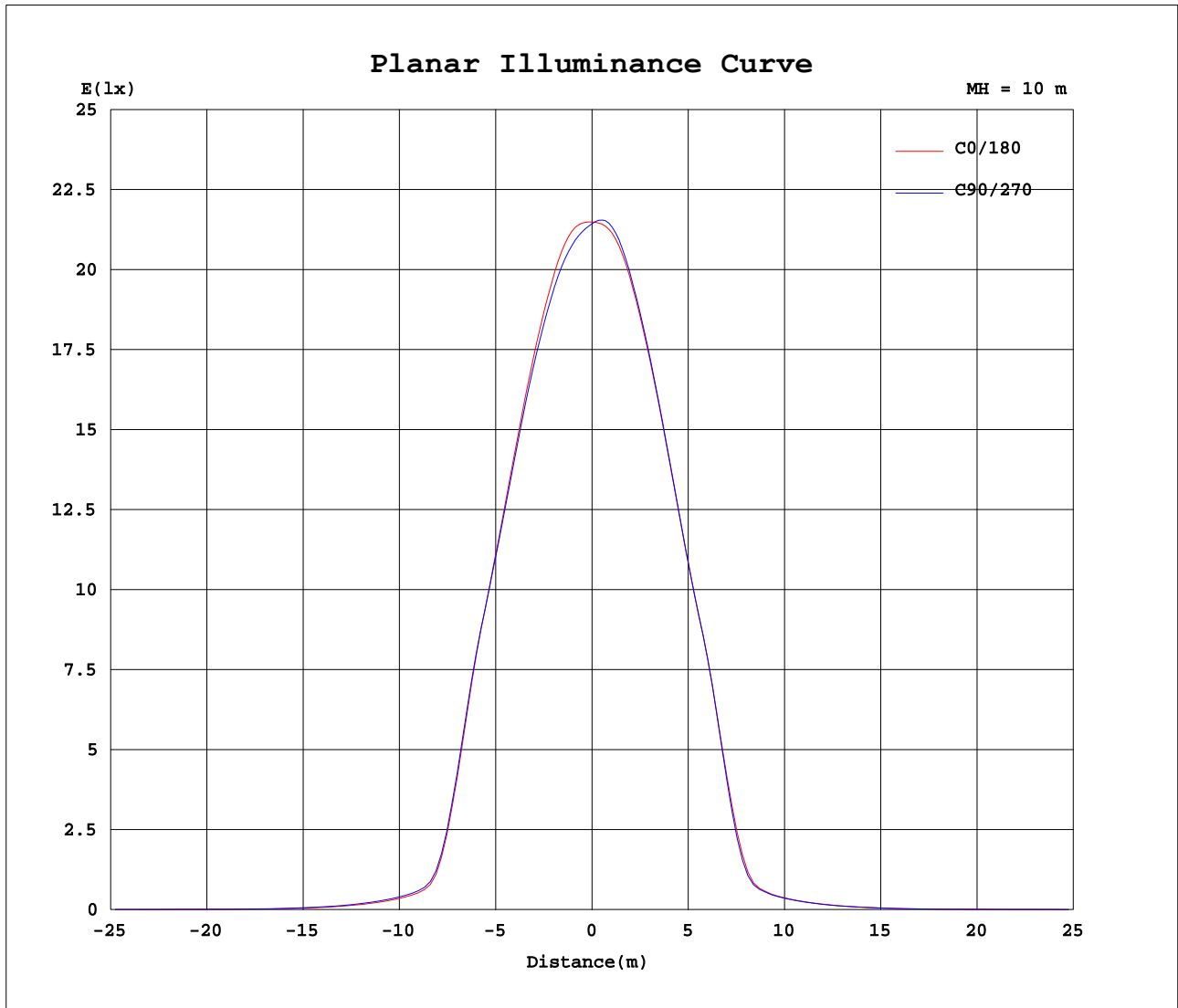
Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: φ160mm*H100mm	
MFR.:		



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Meng Yongjian
Test Date:2018-01-24

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: φ160mm*H100mm	
MFR.:		

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

```

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:34.90V I:0.5000A P:17.45W PF:1.000 Lamp Flux:2087.58x1 lm		
NAME: T150-18W-840-60	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: ϕ 160mm*H100mm	
MFR.:		

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

```

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	2149	2147	2146	2145	2144	2145	2144	2145	2144	2145
3.0	2154	2147	2140	2134	2129	2127	2126	2127	2129	2133
6.0	2154	2144	2134	2125	2117	2112	2109	2111	2114	2121
9.0	2133	2125	2113	2104	2094	2088	2084	2085	2088	2095
12.0	2086	2082	2072	2064	2053	2048	2041	2041	2042	2048
15.0	2021	2021	2013	2009	1997	1991	1983	1983	1980	1984
18.0	1937	1941	1936	1934	1923	1917	1907	1907	1900	1901
21.0	1822	1831	1828	1831	1819	1814	1800	1798	1789	1788
24.0	1686	1698	1696	1702	1691	1685	1669	1666	1654	1652
27.0	1529	1545	1545	1552	1540	1537	1519	1516	1502	1498
30.0	1344	1360	1356	1368	1356	1361	1348	1353	1338	1338
33.0	1035	1056	1048	1071	1061	1077	1057	1065	1042	1044
36.0	604.5	628.1	618.9	638.9	628.0	643.3	628.6	642.1	623.4	628.8
39.0	235.9	251.1	247.0	263.2	258.2	269.8	259.7	268.4	255.5	259.4
42.0	130.1	137.6	137.6	143.5	145.1	148.1	145.5	146.0	142.4	141.7
45.0	99.77	103.4	106.0	110.3	112.5	114.7	113.1	112.2	109.6	108.3
48.0	76.95	80.19	82.73	86.44	88.52	90.39	89.02	88.01	85.73	84.42
51.0	56.85	59.82	61.93	65.37	67.13	68.79	67.48	66.59	64.76	63.65
54.0	40.30	42.90	44.55	47.48	48.44	50.09	48.46	48.20	46.29	45.98
57.0	26.15	28.46	29.95	32.47	32.61	33.42	32.21	32.02	31.00	31.10
60.0	14.83	16.25	17.34	19.36	20.25	21.11	20.49	19.39	18.23	17.93
63.0	10.79	11.64	12.41	13.81	14.95	15.81	15.29	14.41	13.21	12.51
66.0	7.868	8.472	9.020	10.08	10.93	11.62	11.17	10.53	9.607	9.103
69.0	5.548	5.998	6.326	7.059	7.635	8.079	7.736	7.297	6.698	6.404
72.0	3.698	3.972	4.165	4.596	4.884	5.130	4.824	4.628	4.290	4.183
75.0	2.155	2.367	2.418	2.600	2.654	2.686	2.449	2.429	2.345	2.390
78.0	0.9616	1.093	1.067	1.077	0.9068	0.8317	0.7096	0.7556	0.8184	1.010
81.0	0.2031	0.2395	0.2579	0.1810	0.1599	0.1354	0.1576	0.1376	0.1621	0.1875
84.0	0.1268	0.1193	0.1226	0.1188	0.1204	0.1136	0.1203	0.1180	0.1225	0.1215
87.0	0.1181	0.1115	0.1116	0.1071	0.1072	0.1071	0.1093	0.1050	0.1072	0.1071
90.0	0.1159	0.1115	0.1115	0.1115	0.1071	0.1071	0.1071	0.1071	0.1071	0.1071
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	2144	2144	2147	2146	2145	2144	2145	2144	2145	2145
3.0	2137	2141	2151	2154	2157	2160	2162	2164	2164	2165
6.0	2128	2136	2149	2153	2159	2161	2165	2167	2168	2169
9.0	2101	2110	2125	2128	2134	2135	2140	2140	2142	2141
12.0	2051	2059	2075	2076	2083	2083	2089	2087	2089	2086
15.0	1984	1989	2006	2006	2013	2012	2017	2014	2018	2013
18.0	1897	1900	1916	1914	1920	1918	1924	1921	1925	1918
21.0	1779	1782	1797	1792	1799	1795	1802	1798	1803	1795
24.0	1638	1640	1654	1645	1653	1646	1656	1650	1657	1648
27.0	1481	1480	1490	1479	1486	1477	1487	1482	1491	1483
30.0	1316	1312	1319	1303	1310	1299	1311	1305	1319	1314
33.0	1017	1018	1033	1005	1012	994.7	1017	1007	1027	1014
36.0	601.1	600.9	614.9	582.4	582.9	564.9	576.2	566.7	583.4	579.6
39.0	242.9	243.8	251.0	227.5	228.8	218.8	227.0	218.5	227.4	220.5
42.0	137.2	138.5	139.7	133.3	135.2	131.3	135.2	131.7	133.7	128.2
45.0	105.4	104.5	105.1	102.7	102.4	101.3	102.7	102.3	101.6	98.82
48.0	81.90	80.92	81.24	79.38	79.16	78.28	79.40	79.19	78.67	76.54
51.0	61.08	60.48	60.73	58.91	59.00	58.07	59.11	58.80	58.58	56.68
54.0	43.81	43.27	43.62	42.17	42.13	41.62	42.51	42.03	41.99	40.43
57.0	29.06	28.69	29.05	27.86	28.23	27.64	28.13	27.40	27.32	26.05
60.0	16.68	16.35	16.63	15.82	16.04	16.14	17.05	17.24	16.97	15.70
63.0	11.77	11.59	11.64	11.41	11.67	11.95	12.73	12.93	12.70	11.70
66.0	8.602	8.520	8.540	8.371	8.527	8.752	9.334	9.496	9.306	8.551
69.0	6.073	6.103	6.116	5.953	6.035	6.126	6.535	6.586	6.451	5.879
72.0	4.042	4.109	4.132	4.009	3.976	3.969	4.174	4.120	4.008	3.658
75.0	2.372	2.487	2.523	2.386	2.315	2.200	2.220	2.083	1.964	1.848
78.0	1.069	1.182	1.196	1.077	1.002	0.8146	0.7065	0.5305	0.5128	0.4798
81.0	0.2777	0.2808	0.2694	0.2226	0.1806	0.1363	0.1113	0.1292	0.1070	0.1248
84.0	0.1248	0.1115	0.0872	0.0964	0.0699	0.0876	0.0699	0.0897	0.0677	0.0876
87.0	0.1093	0.1093	0.0568	0.0700	0.0590	0.0678	0.0590	0.0700	0.0612	0.0722
90.0	0.1093	0.1093	0.0547	0.0590	0.0590	0.0590	0.0590	0.0612	0.0612	0.0612
G/C	300.0	315.0	330.0	345.0						
0.0	2144	2145	2144	2144						
3.0	2163	2161	2157	2153						
6.0	2168	2166	2162	2156						
9.0	2143	2141	2140	2134						
12.0	2088	2085	2088	2083						
15.0	2014	2011	2017	2016						
18.0	1921	1918	1927	1928						
21.0	1799	1796	1808	1811						

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

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	1655	1653	1669	1674
27.0	1494	1494	1512	1518
30.0	1327	1324	1342	1341
33.0	1034	1024	1048	1042
36.0	602.3	598.8	622.7	617.7
39.0	232.9	229.5	246.4	242.5
42.0	130.4	126.7	131.8	129.6
45.0	98.11	96.98	98.08	98.77
48.0	75.97	74.95	75.55	76.14
51.0	56.49	55.22	55.89	56.15
54.0	40.08	39.18	39.64	39.78
57.0	26.13	25.66	25.89	25.84
60.0	14.89	14.20	14.36	14.50
63.0	11.02	10.45	10.47	10.55
66.0	8.035	7.592	7.618	7.686
69.0	5.576	5.295	5.358	5.443
72.0	3.526	3.414	3.505	3.633
75.0	1.882	1.854	2.016	2.116
78.0	0.6023	0.6981	0.8518	0.9388
81.0	0.1048	0.1254	0.1524	0.1808
84.0	0.0699	0.0876	0.0699	0.0941
87.0	0.0612	0.0700	0.0590	0.0722
90.0	0.0612	0.0612	0.0590	0.0612

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2018-01-24

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: