

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

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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.

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

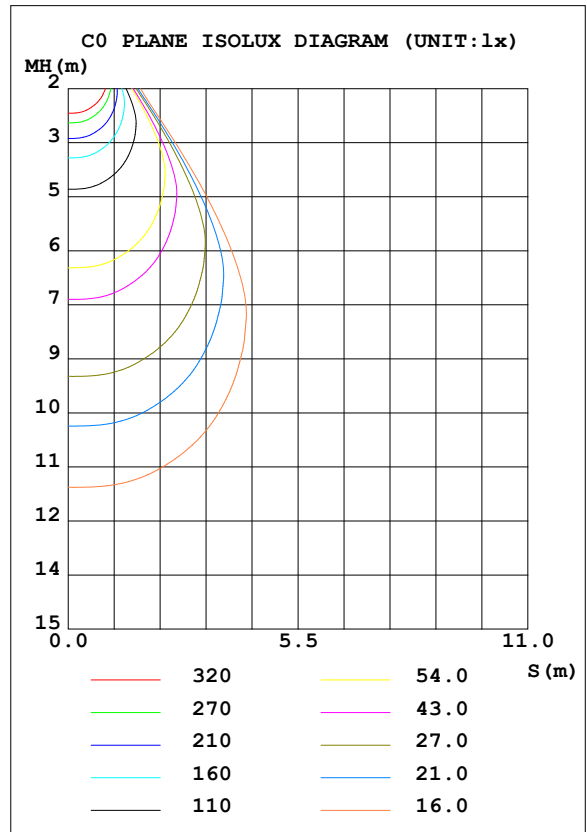
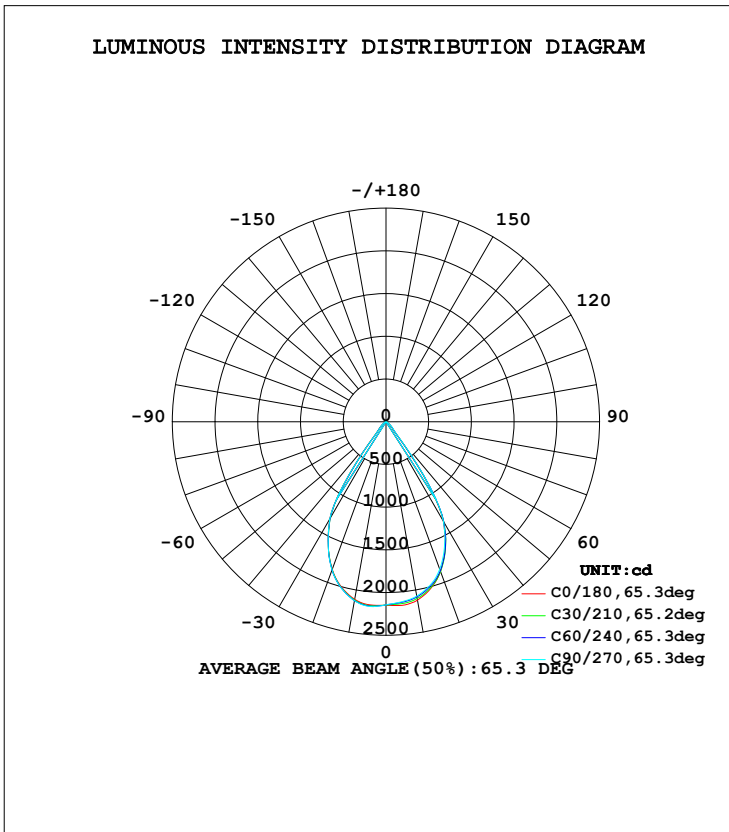
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity: 52%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:34.90V 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.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.63 lm/W			
MODEL	CITIZEN-4000K	I <sub>max</sub> (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



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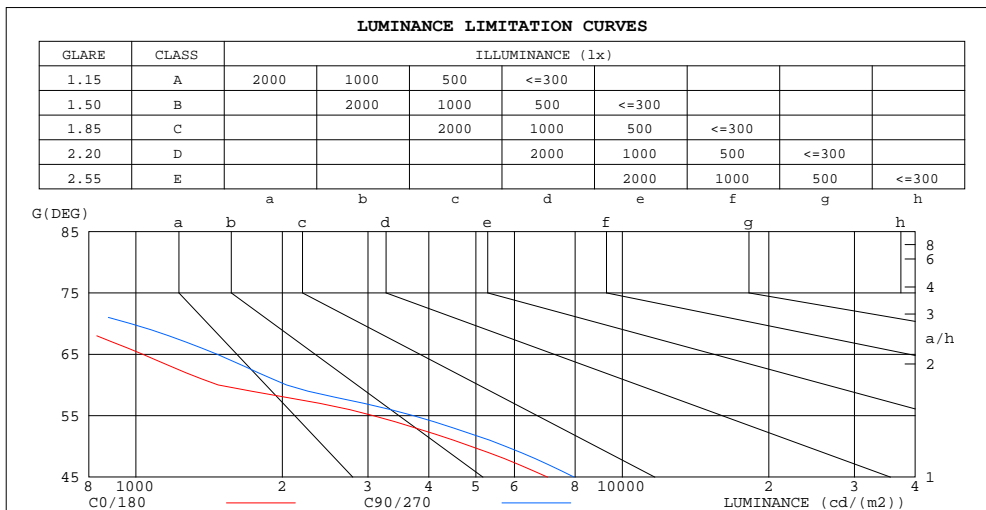
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Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
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**GONIOPHOTOMETERS SYSTEM TEST REPORT**

**ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ 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(DEG)	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

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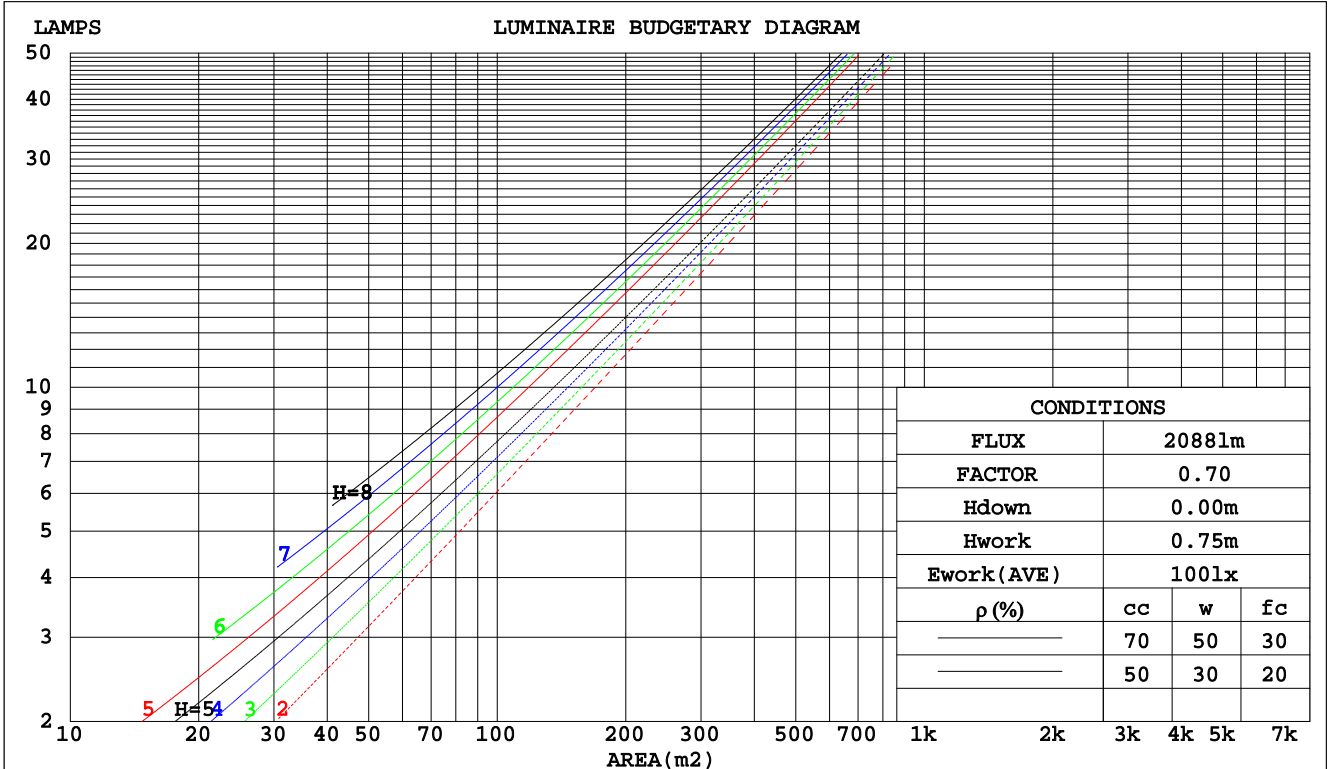
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 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:52%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:34.90V 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.: NEKO LIGHTING AG		

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρw																0
ρfc	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	.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



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WEC AND CCEC

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ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	

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 C Interval: 15.0DEG  
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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.: φ160mm*H100mm	
MFR.: NEKO LIGHTING AG		

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)

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γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
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GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

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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			

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ISOCANDELA DIAGRAM

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Conical surface Flux(90deg):

2005.2 lm

%lum = 96.1%

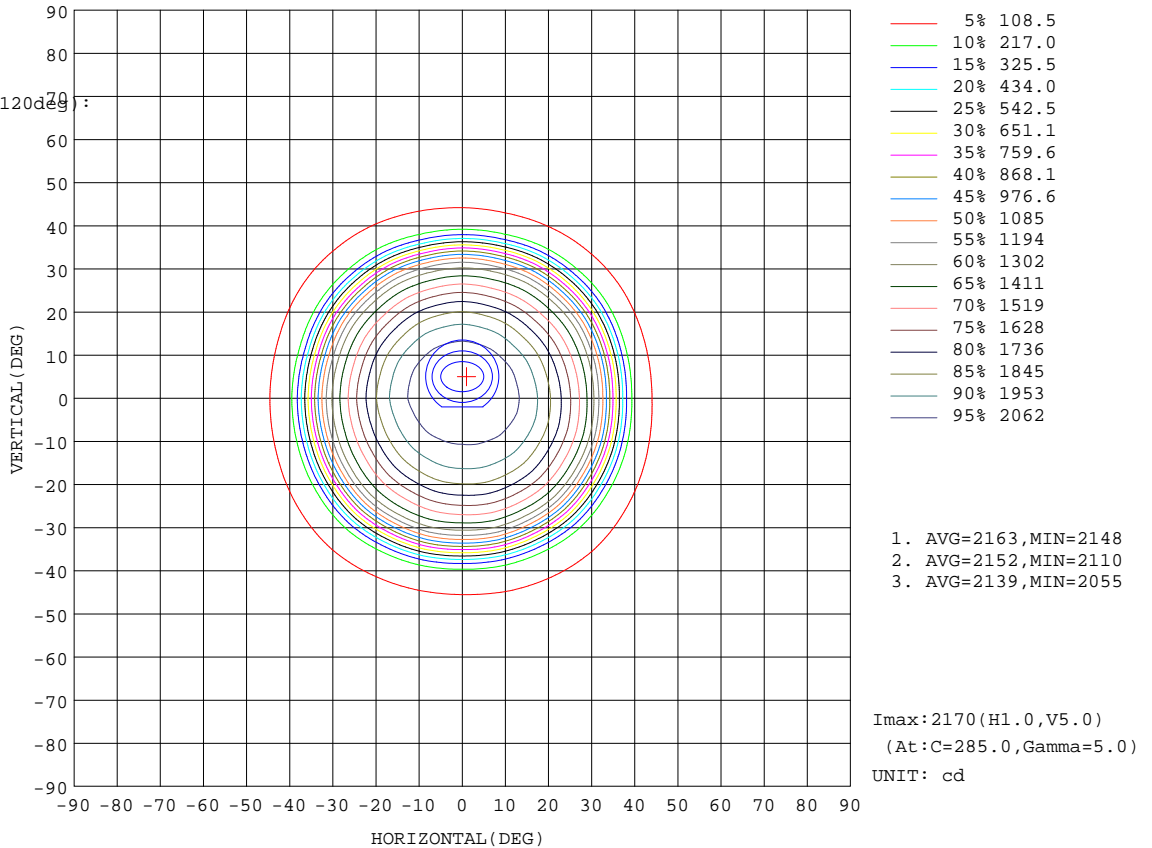
%lamp = 96.1%

Conical surface Flux(120deg):

2074.5 lm

%lum = 99.4%

%lamp = 99.4%



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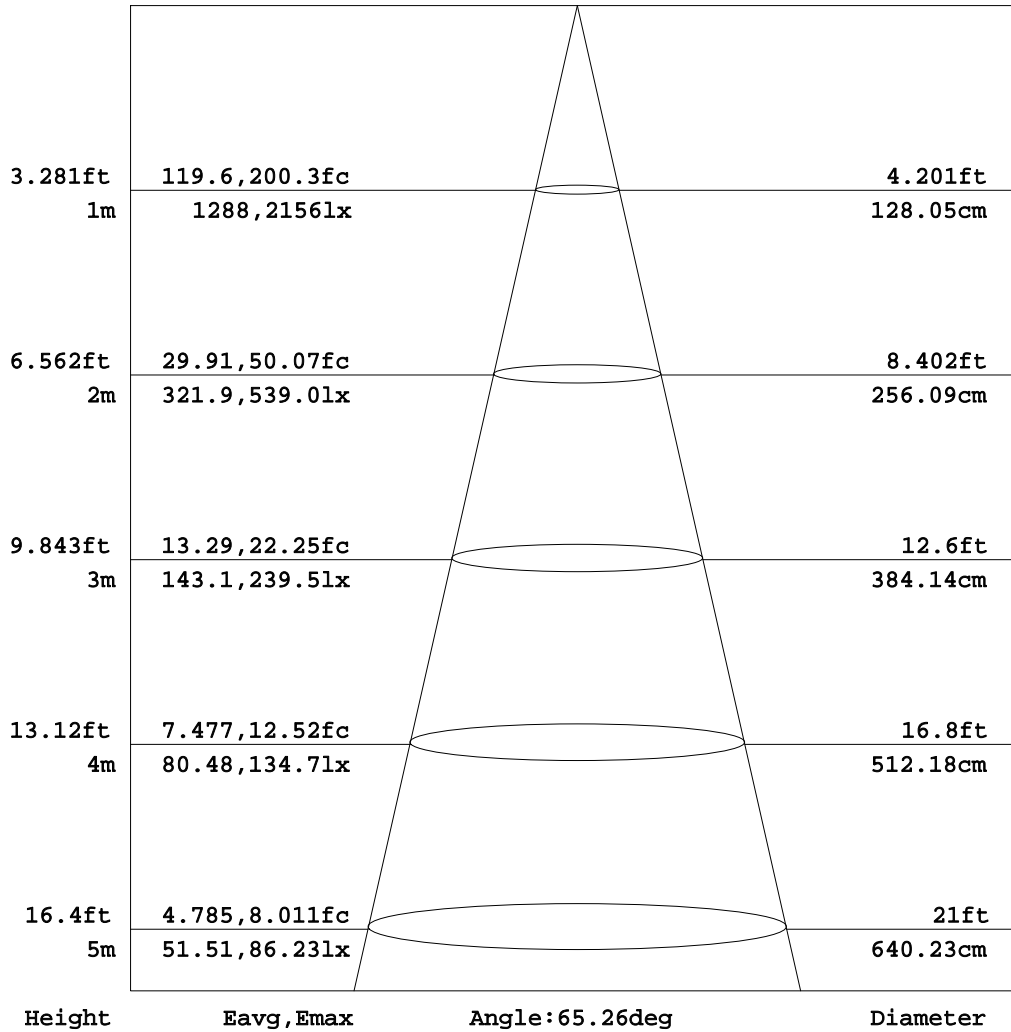


GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

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Flux out:1706 lm



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

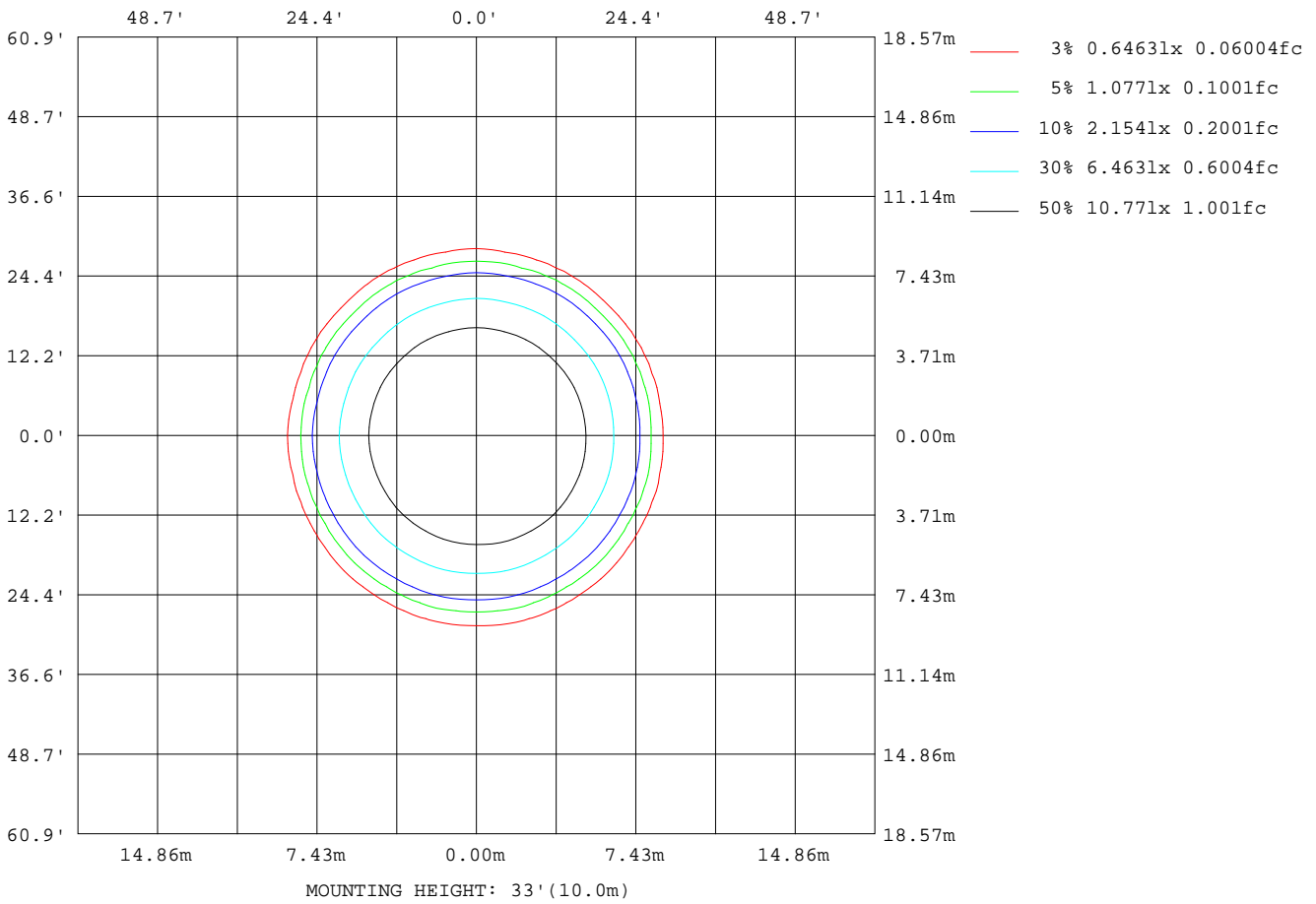
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ISOLUX DIAGRAM

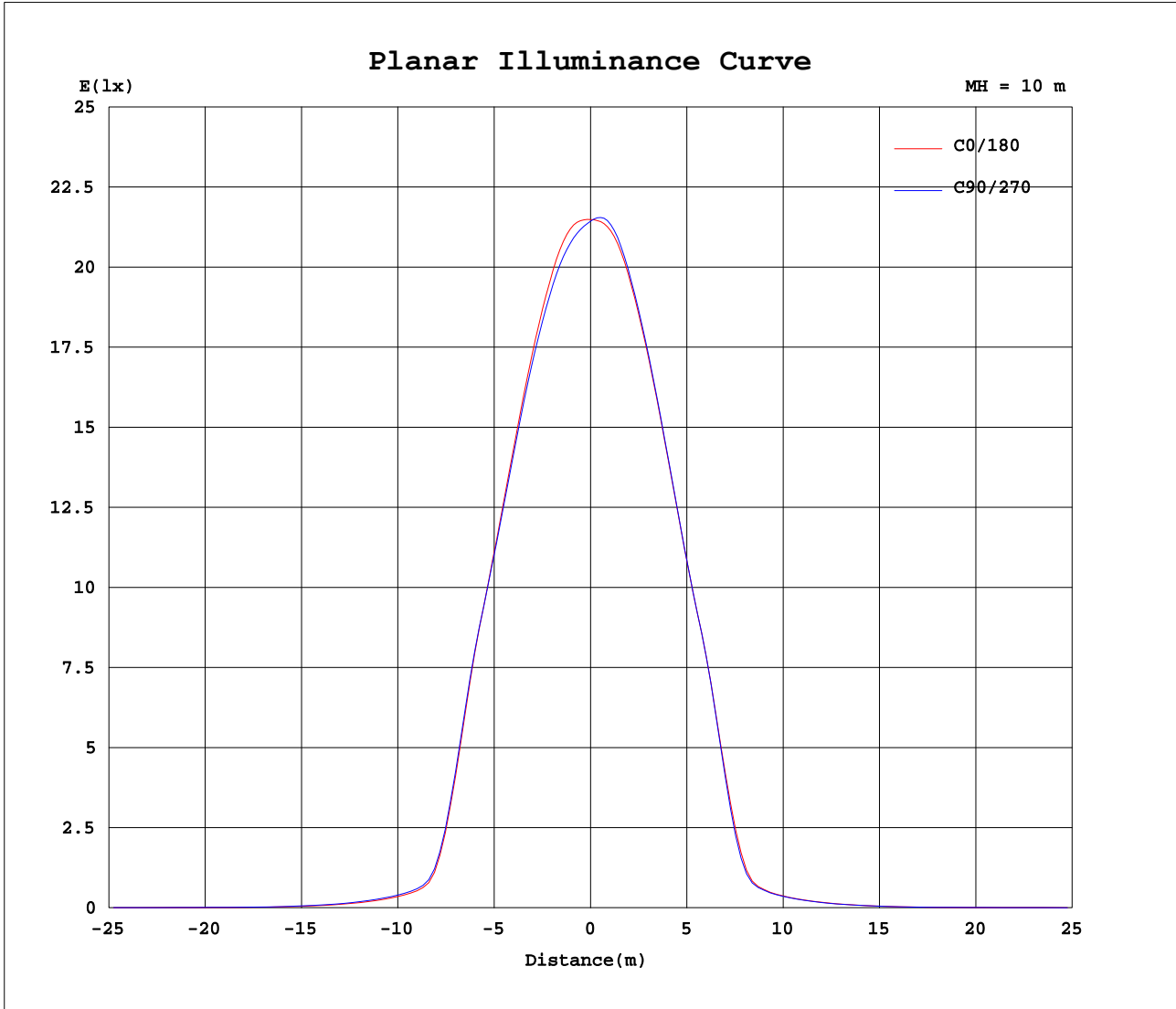
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Planar Illuminance Curve



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**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.: NEKO LIGHTING AG		

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	2149	2147	2146	2145	2144	2145	2144	2145	2144	2145	2144	2144	2149	2147	2146	2145	2144	2145	2144
5	2156	2146	2136	2129	2121	2117	2115	2117	2120	2126	2133	2139	2151	2156	2160	2164	2167	2169	2170
10	2120	2113	2101	2093	2083	2077	2072	2073	2074	2082	2086	2095	2111	2113	2120	2121	2126	2125	2127
15	2021	2021	2013	2009	1997	1991	1983	1983	1980	1984	1984	1989	2006	2006	2013	2012	2017	2014	2018
20	1863	1871	1868	1869	1858	1852	1839	1837	1829	1828	1821	1823	1840	1836	1843	1839	1847	1842	1847
25	1635	1648	1646	1653	1642	1637	1620	1616	1602	1600	1586	1586	1600	1591	1598	1590	1600	1595	1602
30	1344	1360	1356	1368	1356	1361	1348	1353	1338	1338	1316	1312	1319	1303	1310	1299	1311	1305	1319
35	749	776	765	789	775	794	774	790	766	773	741	744	760	724	730	708	728	713	738
40	175	186	185	196	195	203	196	200	192	194	184	183	187	175	175	171	175	171	173
45	99.8	103	106	110	113	115	113	112	110	108	105	104	105	103	102	101	103	102	102
50	63.2	66.3	68.7	72.1	73.9	75.8	74.3	73.5	71.4	70.3	67.8	67.0	67.2	65.6	65.4	64.7	65.5	65.4	65.0
55	35.5	37.9	39.4	42.1	43.0	44.5	42.9	42.7	40.9	40.7	38.7	38.2	38.6	37.2	37.3	36.7	37.7	37.2	37.0
60	14.8	16.3	17.3	19.4	20.3	21.1	20.5	19.4	18.2	17.9	16.7	16.4	16.6	15.8	16.0	16.1	17.1	17.2	17.0
65	8.77	9.44	10.1	11.2	12.2	12.9	12.5	11.7	10.7	10.1	9.57	9.44	9.47	9.29	9.49	9.73	10.4	10.6	10.4
70	4.89	5.27	5.55	6.19	6.66	7.04	6.71	6.36	5.83	5.61	5.35	5.39	5.41	5.26	5.30	5.36	5.70	5.70	5.59
75	2.16	2.37	2.42	2.60	2.65	2.69	2.45	2.43	2.34	2.39	2.37	2.49	2.52	2.39	2.32	2.20	2.22	2.08	1.96
80	0.39	0.47	0.46	0.37	0.19	0.17	0.18	0.16	0.19	0.37	0.49	0.53	0.52	0.45	0.38	0.24	0.14	0.15	0.13
85	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.07	0.08	0.06	0.08	0.06	0.08	0.06
90	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.05	0.06	0.06	0.06	0.06	0.06	0.06

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Temperature:25.3DEG	Humidity:52%
Operators:Meng Yongjian	Test Distance:5.850m [K=1.0000]
Test Date:2018-01-24	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.: NEKO LIGHTING AG		

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	2145	2144	2145	2144	2144														
5	2170	2170	2167	2163	2158														
10	2125	2127	2125	2126	2120														
15	2013	2014	2011	2017	2016														
20	1838	1843	1839	1851	1853														
25	1593	1600	1599	1616	1622														
30	1314	1327	1324	1342	1341														
35	727	753	744	771	763														
40	169	173	171	179	177														
45	98.8	98.1	97.0	98.1	98.8														
50	62.9	62.7	61.4	62.1	62.4														
55	35.5	35.2	34.4	35.0	35.0														
60	15.7	14.9	14.2	14.4	14.5														
65	9.54	8.96	8.47	8.49	8.57														
70	5.09	4.85	4.63	4.70	4.80														
75	1.85	1.88	1.85	2.02	2.12														
80	0.15	0.13	0.22	0.32	0.37														
85	0.08	0.07	0.08	0.07	0.09														
90	0.06	0.06	0.06	0.06	0.06														

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	0.1225
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: