

LED Downlight TAKEO Series T200-52W-840-18

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Light Output Ratio:	100.0%	
Luminaire Power:	51.24 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: 2018-01-24

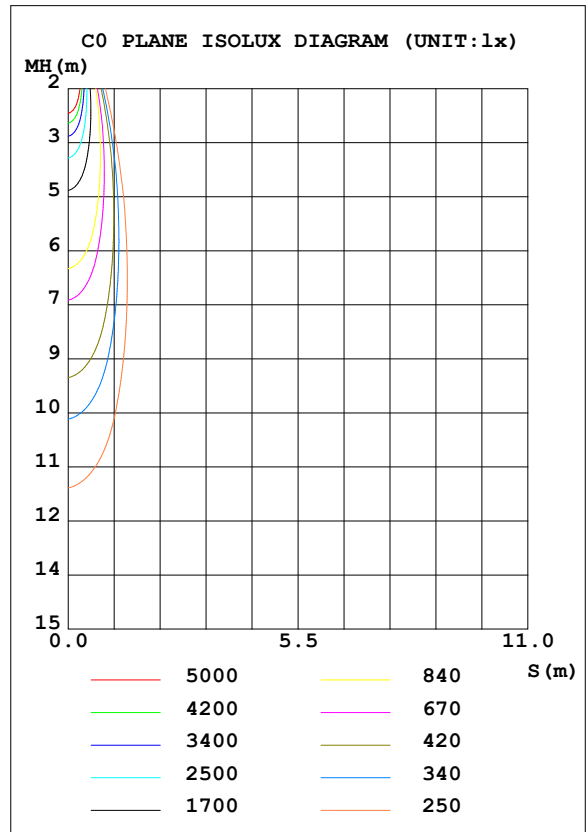
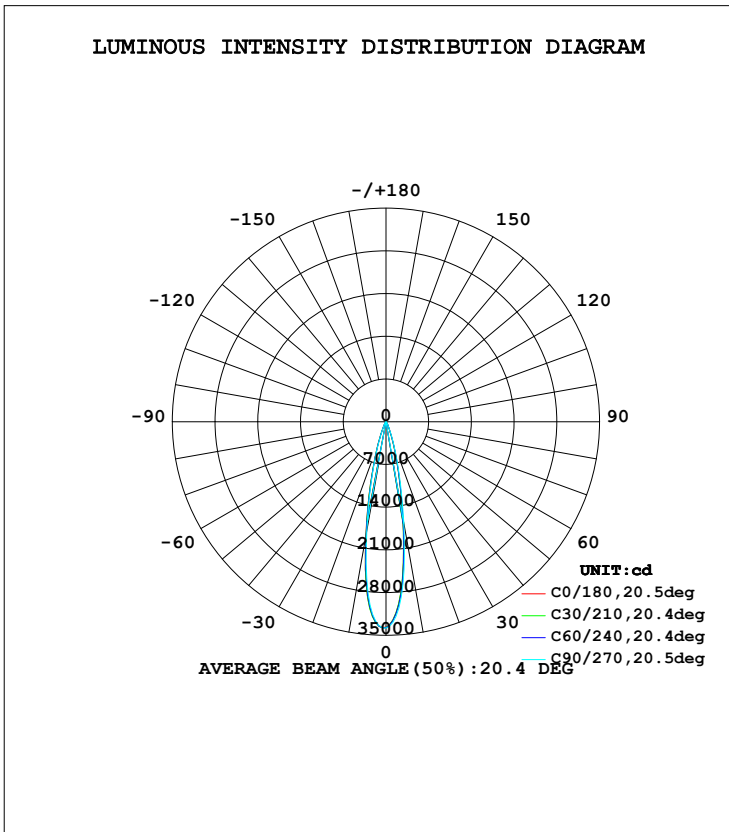
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity: 52%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:36.60V I:1.400A P:51.24W PF:1.000 Lamp Flux:5743.92x1 lm		
NAME: T200-52W-840-18	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: φ218mm*H126mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 112.10 lm/W			
MODEL	CITIZEN-4000K	I <sub>max</sub> (cd)	33836	S/MH (C0/180)	0.37
NOMINAL POWER (W)	52	LOR (%)	100.0	S/MH (C90/270)	0.36
RATED VOLTAGE (V)	36.0	TOTAL FLUX (lm)	5743.9	η UP, DN (C0-180)	0.0, 49.0
NOMINAL FLUX (lm)	5743.92	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	36.2	η down (%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG  
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 Temperature: 25.3DEG  
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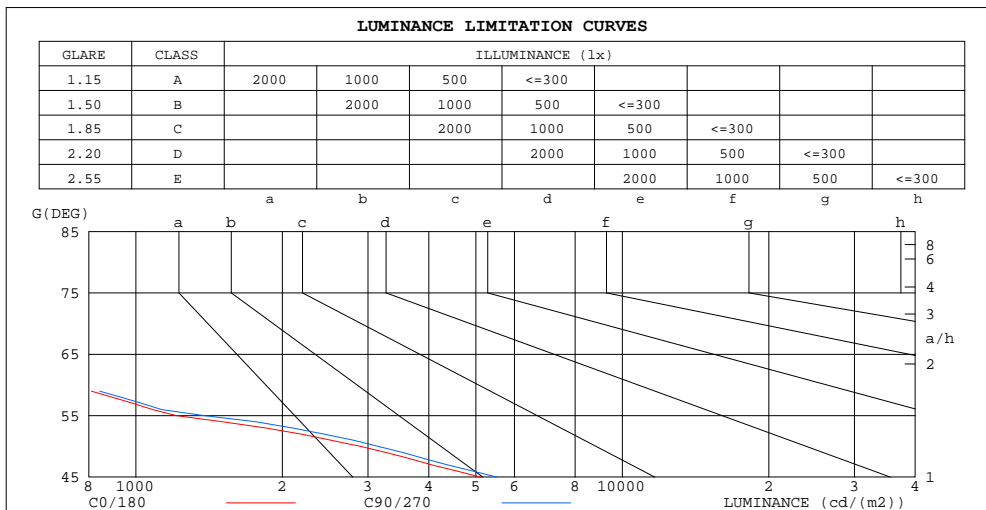
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**GONIOPHOTOMETERS SYSTEM TEST REPORT**

**ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	#lum,lamp
10	1600	1604	1676	1796	1908	1870	1824	1707	0- 10	2408	2408	41.9,41.9
20	278.0	296.6	320.5	348.6	361.9	341.9	326.4	291.9	10- 20	2284	4692	81.7,81.7
30	58.81	61.40	64.86	68.00	67.90	65.44	62.69	59.90	20- 30	650.8	5342	93,93
40	23.73	24.63	26.00	25.81	25.75	24.64	24.51	23.77	30- 40	252.8	5595	97.4,97.4
50	6.949	7.226	7.551	7.071	7.324	6.986	7.384	6.836	40- 50	111.2	5706	99.3,99.3
60	1.362	1.502	1.411	1.346	1.398	1.457	1.450	1.324	50- 60	29.83	5736	99.9,99.9
70	0.1890	0.2102	0.1404	0.1886	0.2057	0.1956	0.1552	0.1763	60- 70	6.820	5743	100,100
80	0.0289	0.0262	0.0278	0.0247	0.0254	0.0273	0.0249	0.0255	70- 80	0.5306	5744	100,100
90	0.0223	0.0219	0.0210	0.0203	0.0168	0.0171	0.0173	0.0168	80- 90	0.2537	5744	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:×10cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	81	75
80	45	43
75	33	32
70	148	110
65	404	394
60	730	757
55	1212	1383
50	2898	3149
45	5111	5526

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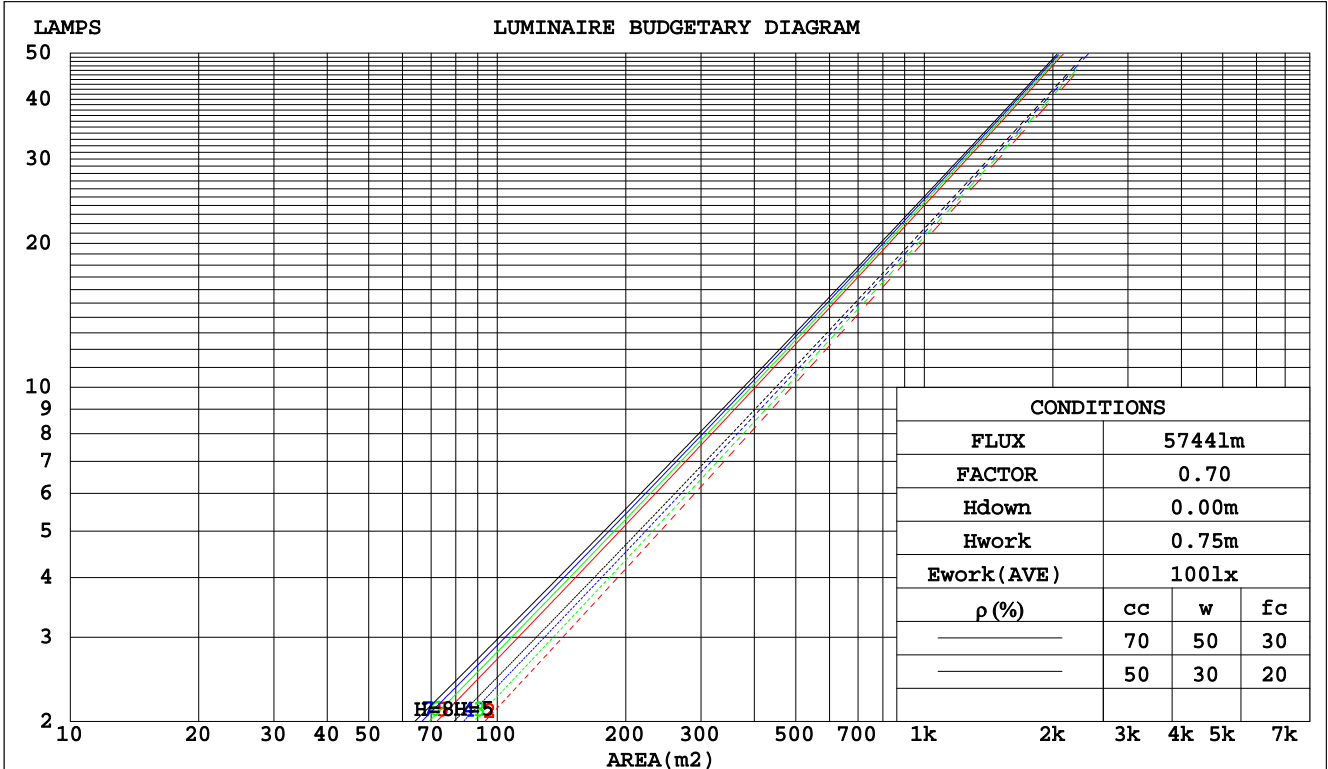
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GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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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	1.00
1.0	1.13	1.11	1.10	1.11	1.09	1.08	1.07	1.06	1.05	1.03	1.02	1.01	.00	.99	.99	.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	1.03	.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	.84	.81	.86	.83	.81	.86	.82	.80	.85	.82	.80	.79
9.0	.85	.82	.79	.85	.81	.79	.84	.81	.79	.84	.80	.78	.83	.80	.78	.77
10.0	.83	.79	.77	.83	.79	.77	.82	.79	.77	.82	.79	.76	.81	.78	.76	.75



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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	.134	.076	.024	.127	.073	.023	.115	.066	.021	.103	.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	.049	.015	.084	.046	.014	
5.0	.101	.052	.015	.098	.050	.015	.092	.048	.014	.086	.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	.088	.044	.013	.084	.042	.012	.080	.041	.012	.076	.039	.012	
8.0	.086	.042	.012	.084	.041	.012	.080	.040	.011	.077	.039	.011	.073	.037	.011	
9.0	.082	.040	.011	.080	.039	.011	.077	.038	.011	.074	.037	.011	.071	.036	.010	
10.0	.079	.038	.010	.077	.037	.010	.074	.036	.010	.071	.035	.010	.068	.034	.010	

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	.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	.052	.037	.026	.030	.022	.015	.010	.007	.005	
9.0	.082	.055	.036	.071	.047	.031	.049	.033	.022	.029	.020	.013	.009	.006	.004	
10.0	.077	.050	.032	.067	.043	.028	.046	.030	.020	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG  
 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:36.60V I:1.400A P:51.24W PF:1.000 Lamp Flux:5743.92x1 lm		
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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	8.1	8.8	8.3	8.9	9.1	8.5	9.2	8.7	9.3	9.5
3H	8.0	8.6	8.2	8.8	9.0	8.4	9.0	8.6	9.2	9.4
4H	7.9	8.5	8.2	8.7	8.9	8.3	8.9	8.6	9.1	9.3
6H	7.8	8.4	8.1	8.6	8.8	8.2	8.8	8.5	9.0	9.2
8H	7.8	8.3	8.1	8.6	8.8	8.2	8.7	8.5	9.0	9.2
12H	7.8	8.3	8.1	8.5	8.8	8.2	8.6	8.5	8.9	9.2
4H 2H	8.0	8.5	8.2	8.7	8.9	8.4	8.9	8.6	9.1	9.3
3H	7.8	8.3	8.1	8.6	8.8	8.2	8.7	8.5	8.9	9.2
4H	7.7	8.2	8.0	8.5	8.8	8.1	8.6	8.4	8.8	9.1
6H	7.6	8.0	8.0	8.3	8.7	8.0	8.4	8.4	8.7	9.1
8H	7.6	7.9	7.9	8.3	8.6	7.9	8.3	8.3	8.7	9.0
12H	7.5	7.8	7.9	8.2	8.6	7.9	8.2	8.3	8.6	9.0
8H 4H	7.6	7.9	7.9	8.3	8.6	7.9	8.3	8.3	8.7	9.0
6H	7.4	7.8	7.9	8.1	8.6	7.8	8.1	8.2	8.5	8.9
8H	7.4	7.7	7.8	8.1	8.5	7.8	8.0	8.2	8.5	8.9
12H	7.3	7.6	7.8	8.0	8.5	7.7	7.9	8.2	8.4	8.8
12H 4H	7.5	7.8	7.9	8.2	8.6	7.9	8.2	8.3	8.6	9.0
6H	7.4	7.7	7.8	8.1	8.5	7.8	8.0	8.2	8.5	8.9
8H	7.3	7.6	7.8	8.0	8.5	7.7	7.9	8.2	8.4	8.8
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / - 8.9					+ 2.7 / - 9.2				
1.5H	+ 3.8 / - 7.1					+ 4.0 / - 7.4				
2.0H	+ 5.6 / - 7.7					+ 5.7 / - 8.1				

CIE Pub.117 Corrected 5744 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.1)

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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	90	84	81	89	84	80	89	84	80	77
0.80	97	92	88	96	91	88	95	91	88	84
1.00	101	96	93	100	95	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	96	92
1.50	107	103	100	106	102	99	104	101	98	94
2.00	110	106	103	108	105	102	105	103	100	95
2.50	111	108	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	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

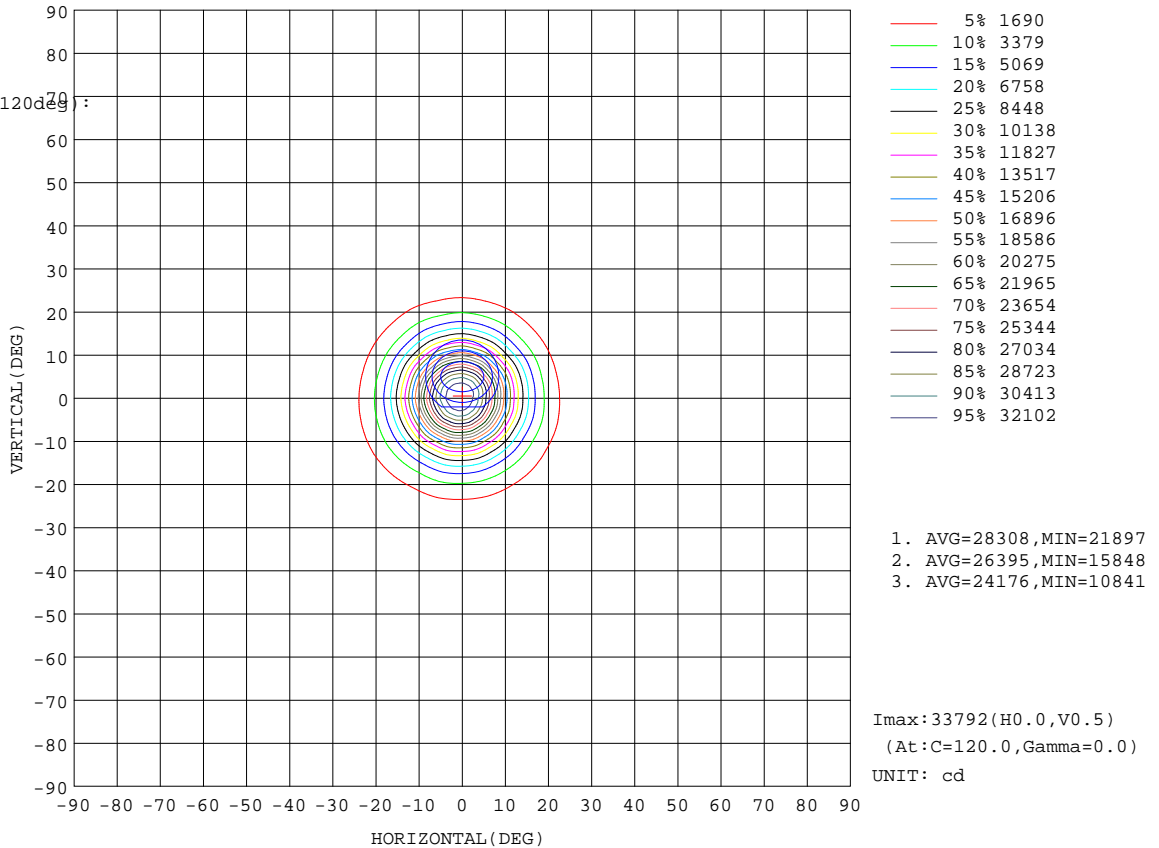
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Conical surface Flux(90deg):

5665.6 lm  
%lum = 98.6%  
%lamp = 98.6%

Conical surface Flux(120deg):

5736.3 lm  
%lum = 99.9%  
%lamp = 99.9%



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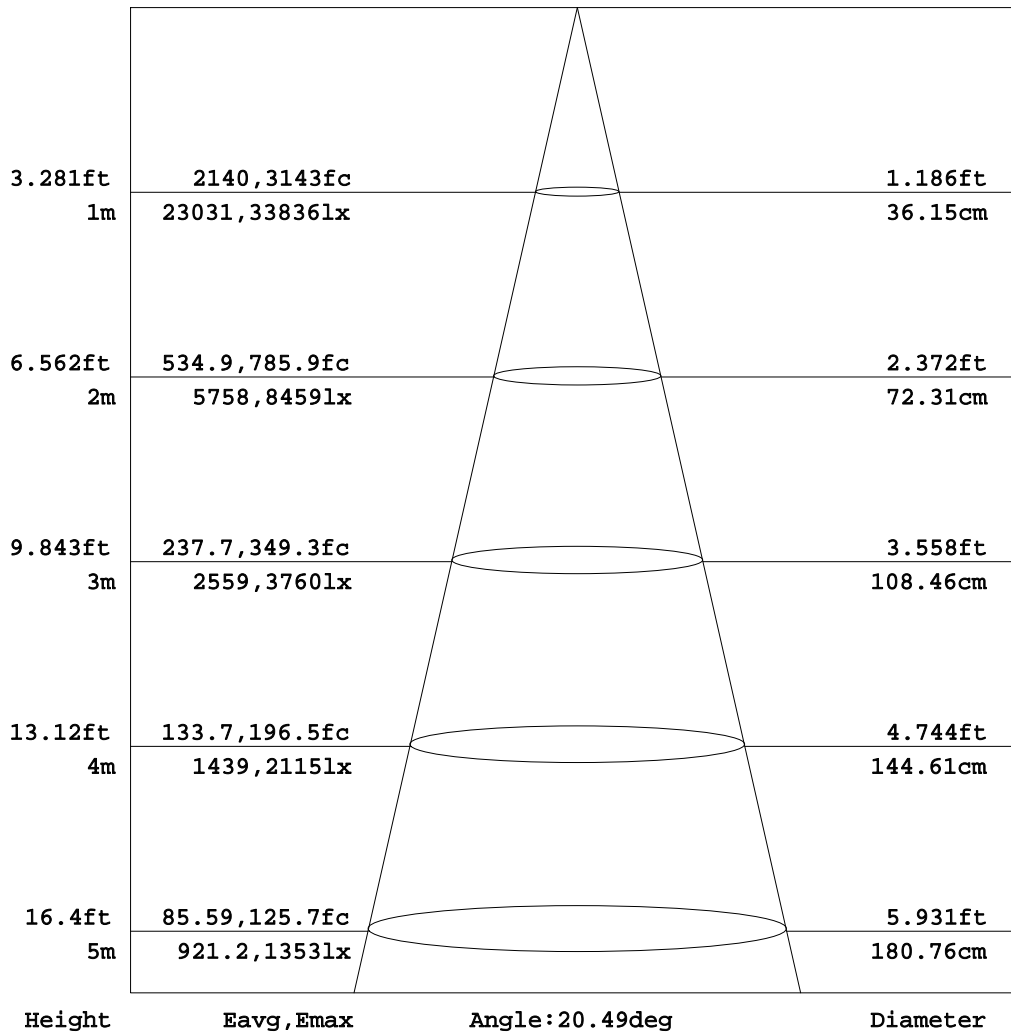


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AAI Figure

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Flux out:2734 lm



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

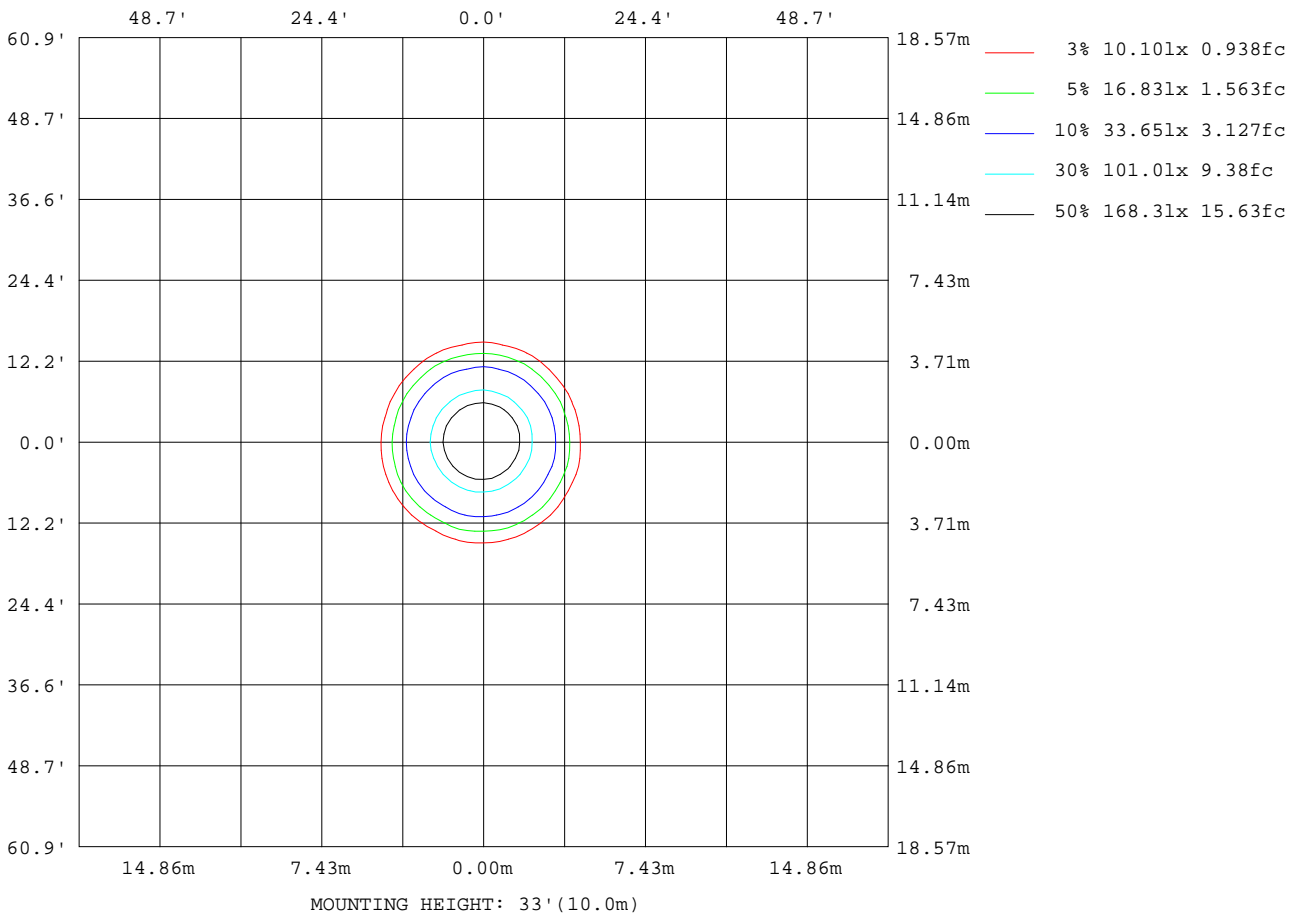
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ISOLUX DIAGRAM

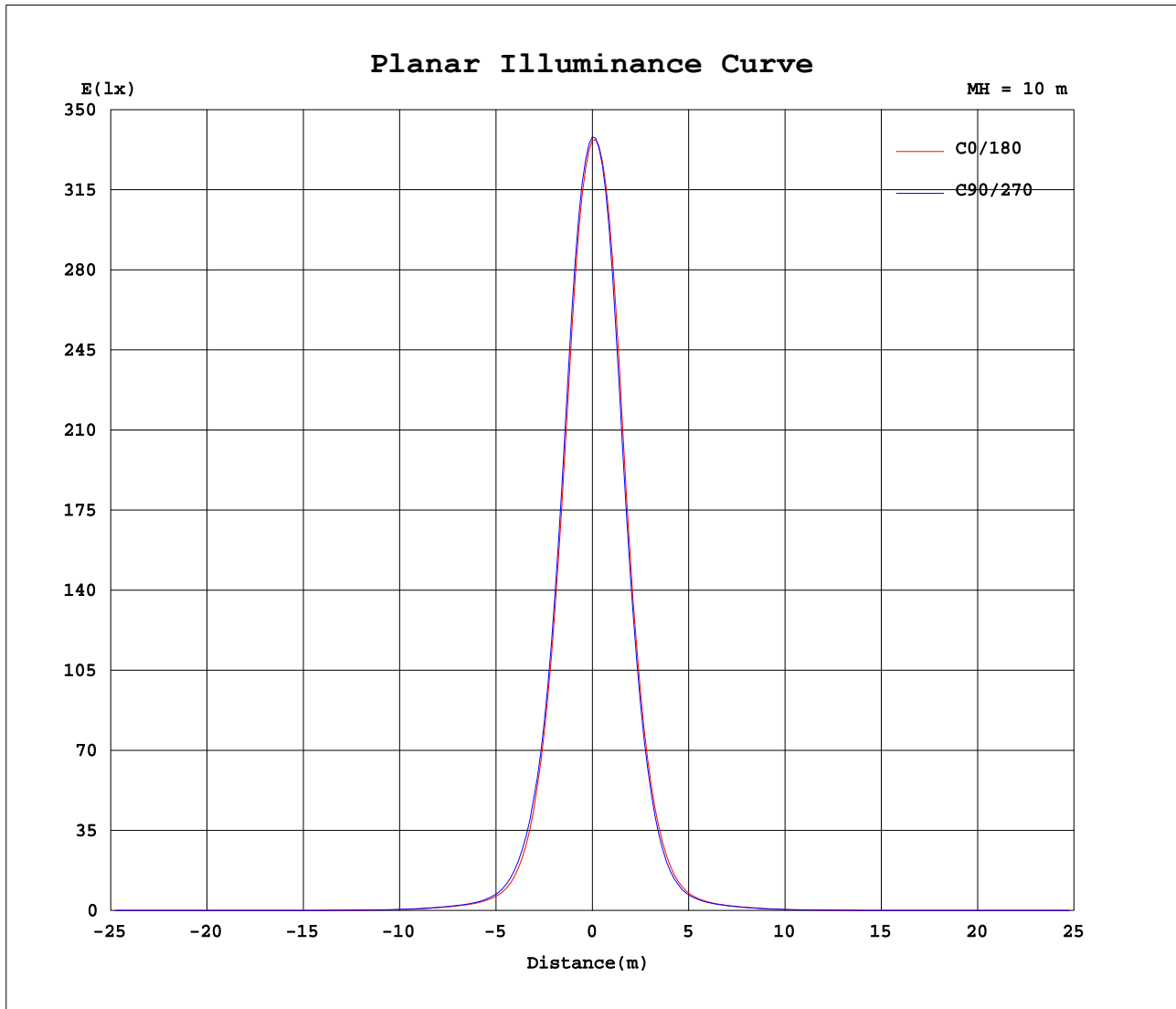
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Planar Illuminance Curve



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GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:36.60V I:1.400A P:51.24W PF:1.000 Lamp Flux:5743.92x1 lm		
NAME: T200-52W-840-18	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: φ218mm*H126mm	
MFR.: NEKO LIGHTING AG		

Table--1

UNIT: x10cd

C (DEG) \ γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	3365	3369	3370	3373	3374	3380	3381	3384	3384	3383	3375	3373	3365	3369	3370	3373	3374	3380	3381
5	2811	2818	2802	2827	2833	2875	2886	2925	2939	2990	2995	3025	3064	3060	3071	3049	3045	3013	3010
10	1600	1603	1578	1604	1611	1663	1676	1725	1735	1796	1811	1852	1908	1892	1912	1870	1874	1825	1824
15	718	725	706	726	729	759	764	796	794	831	840	862	890	877	889	863	868	836	840
20	278	288	283	297	305	315	321	338	330	349	363	361	362	354	353	342	346	323	326
25	110	113	113	118	121	126	128	133	131	141	142	144	142	134	134	130	130	123	123
30	58.8	59.4	59.8	61.4	63.0	64.7	64.9	66.8	66.2	68.0	68.6	68.4	67.9	66.2	66.4	65.4	64.4	63.2	62.7
35	37.4	37.7	37.6	38.5	39.1	40.4	40.8	41.3	40.9	41.6	41.9	41.7	41.4	40.8	40.9	40.1	40.1	39.3	39.3
40	23.7	24.1	24.0	24.6	24.8	25.8	26.0	25.9	25.4	25.8	25.5	25.6	25.7	25.1	25.2	24.6	24.7	24.4	24.5
45	13.5	13.8	13.6	14.1	14.0	14.6	14.6	14.5	14.1	14.3	13.8	14.1	14.4	13.8	14.1	13.7	13.9	13.9	14.3
50	6.95	7.01	7.02	7.23	7.20	7.56	7.55	7.28	7.02	7.07	6.90	7.04	7.32	7.00	7.10	6.99	7.04	7.21	7.38
55	2.59	2.70	2.71	2.80	2.81	2.80	2.96	2.66	2.63	2.68	2.59	2.73	2.94	2.71	2.79	2.74	2.80	2.78	3.02
60	1.36	1.43	1.45	1.50	1.48	1.48	1.41	1.39	1.35	1.35	1.32	1.35	1.40	1.40	1.45	1.46	1.49	1.46	1.45
65	0.64	0.67	0.68	0.71	0.68	0.66	0.62	0.62	0.61	0.63	0.62	0.63	0.66	0.66	0.69	0.68	0.68	0.65	0.65
70	0.19	0.20	0.21	0.21	0.17	0.16	0.14	0.15	0.16	0.19	0.19	0.20	0.21	0.20	0.21	0.20	0.17	0.15	0.16
75	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
80	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.02
85	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02
90	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

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:36.60V I:1.400A P:51.24W PF:1.000 Lamp Flux:5743.92x1 lm		
NAME: T200-52W-840-18	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: φ218mm*H126mm	
MFR.: NEKO LIGHTING AG		

Table--2

UNIT: x10cd

γ (DEG) \ C (DEG)	285	300	315	330	345													
0	3384	3384	3383	3375	3373													
5	2978	2971	2924	2911	2872													
10	1775	1774	1707	1692	1649													
15	806	799	762	761	736													
20	312	310	292	291	277													
25	119	119	113	111	109													
30	61.9	61.5	59.9	58.5	57.5													
35	38.6	38.6	37.8	37.3	36.9													
40	23.9	24.1	23.8	23.9	23.7													
45	13.6	13.8	13.5	13.7	13.5													
50	6.97	6.92	6.84	6.89	6.91													
55	2.61	2.61	2.54	2.60	2.58													
60	1.38	1.36	1.32	1.35	1.35													
65	0.62	0.62	0.61	0.63	0.63													
70	0.15	0.16	0.18	0.19	0.19													
75	0.03	0.03	0.03	0.03	0.03													
80	0.03	0.02	0.03	0.02	0.03													
85	0.02	0.02	0.02	0.02	0.03													
90	0.02	0.02	0.02	0.02	0.02													

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	33654	33693	33698	33735	33745	33798	33811	33836	33836	33830
3.0	31409	31450	31357	31504	31552	31830	31915	32156	32231	32507
6.0	25898	25981	25786	26064	26135	26639	26764	27239	27399	27999
9.0	18347	18400	18122	18418	18479	19057	19177	19733	19833	20552
12.0	11853	11925	11659	11917	11933	12427	12474	13006	12967	13590
15.0	7178	7252	7060	7256	7288	7590	7640	7961	7935	8313
18.0	4107	4221	4112	4290	4367	4529	4574	4818	4740	4985
21.0	2279	2378	2335	2464	2532	2625	2665	2817	2734	2906
24.0	1297	1375	1335	1432	1442	1534	1526	1595	1556	1650
27.0	828.2	846.5	842.9	877.1	896.7	934.0	945.4	973.8	956.9	995.5
30.0	588.1	593.8	598.5	614.0	630.4	647.2	648.6	667.8	662.4	680.0
33.0	439.3	444.2	444.0	455.3	464.5	479.5	483.7	491.2	487.9	497.6
36.0	344.8	348.5	347.7	355.6	360.5	372.8	376.4	379.8	376.2	382.1
39.0	261.9	265.2	263.9	270.7	273.1	284.5	286.7	287.8	282.8	287.6
42.0	191.2	194.5	194.1	199.5	200.6	208.5	209.8	209.2	204.4	206.1
45.0	134.8	138.1	136.2	141.1	139.6	146.2	145.8	144.9	140.7	143.1
48.0	91.20	92.24	92.18	94.22	93.98	97.60	97.71	94.92	92.03	92.53
51.0	59.06	60.24	59.94	62.06	62.32	65.30	65.71	62.48	59.60	60.04
54.0	33.03	34.22	33.69	35.41	35.51	38.00	38.71	35.40	33.73	34.40
57.0	20.04	20.87	21.17	21.85	21.61	21.71	20.89	20.66	19.95	19.92
60.0	13.62	14.25	14.53	15.02	14.80	14.79	14.11	13.94	13.46	13.46
63.0	8.859	9.316	9.520	9.820	9.587	9.522	8.981	8.903	8.639	8.705
66.0	5.262	5.589	5.663	5.853	5.511	5.376	4.992	5.031	4.956	5.189
69.0	2.577	2.781	2.797	2.869	2.491	2.342	2.112	2.185	2.241	2.561
72.0	0.8196	0.9125	0.9030	0.9190	0.5857	0.4535	0.4445	0.4187	0.5434	0.8473
75.0	0.3193	0.2973	0.3238	0.3017	0.3194	0.2907	0.3084	0.2798	0.2931	0.2776
78.0	0.2952	0.2733	0.2975	0.2733	0.2931	0.2732	0.2887	0.2580	0.2756	0.2558
81.0	0.2821	0.2623	0.2842	0.2558	0.2712	0.2492	0.2734	0.2470	0.2624	0.2405
84.0	0.2690	0.2470	0.2690	0.2383	0.2537	0.2360	0.2516	0.2273	0.2471	0.2273
87.0	0.2494	0.2252	0.2407	0.2143	0.2253	0.2077	0.2253	0.2033	0.2166	0.2055
90.0	0.2230	0.2208	0.2186	0.2186	0.2099	0.2121	0.2099	0.2099	0.2012	0.2033
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	33751	33729	33654	33693	33735	33798	33811	33836	33811	33836
3.0	32498	32668	32868	32890	32953	32862	32844	32704	32673	32505
6.0	28110	28475	28949	28878	28987	28691	28631	28249	28207	27799
9.0	20722	21202	21750	21589	21731	21337	21303	20806	20767	20292
12.0	13596	14025	14386	14259	14429	14057	14187	13686	13786	13222
15.0	8398	8618	8899	8770	8887	8633	8682	8360	8395	8055
18.0	5113	5171	5246	5154	5179	5021	5069	4791	4845	4660
21.0	3031	2999	2986	2919	2908	2814	2843	2645	2662	2559
24.0	1717	1695	1669	1614	1620	1562	1606	1472	1504	1416
27.0	1020	1013	994.4	963.6	966.3	936.1	938.8	901.5	902.9	879.2
30.0	685.6	683.7	679.0	662.4	664.0	654.4	644.2	631.6	626.9	619.3
33.0	500.6	498.4	494.3	486.7	487.8	477.0	476.1	466.2	464.7	456.6
36.0	383.8	382.2	380.5	375.0	376.1	368.8	368.7	361.7	361.7	354.9
39.0	285.2	285.2	287.5	280.4	281.2	273.7	274.8	269.8	270.9	264.2
42.0	201.9	202.7	205.6	200.1	201.8	197.5	197.9	196.4	198.3	193.5
45.0	138.5	140.7	144.3	138.0	140.6	137.0	138.7	139.1	142.8	136.5
48.0	90.56	92.13	95.11	91.87	93.17	92.18	93.00	94.17	95.82	91.96
51.0	58.37	59.98	62.65	59.03	59.94	59.26	60.24	62.95	63.90	59.39
54.0	33.26	34.71	36.94	34.20	34.88	34.26	34.29	37.39	39.10	33.35
57.0	19.52	19.87	20.54	20.55	21.24	21.30	21.81	21.56	21.41	20.43
60.0	13.22	13.46	13.98	14.01	14.53	14.57	14.92	14.65	14.50	13.80
63.0	8.585	8.771	9.103	9.146	9.509	9.475	9.654	9.393	9.265	8.827
66.0	5.135	5.273	5.477	5.454	5.735	5.590	5.561	5.258	5.251	4.976
69.0	2.566	2.664	2.771	2.715	2.884	2.685	2.510	2.244	2.298	2.154
72.0	0.8632	0.9147	0.9506	0.9080	0.9680	0.8795	0.6155	0.4526	0.5177	0.4155
75.0	0.2953	0.2820	0.2732	0.2997	0.2798	0.3040	0.2798	0.2997	0.2776	0.2844
78.0	0.2777	0.2667	0.2567	0.2777	0.2558	0.2799	0.2536	0.2755	0.2536	0.2668
81.0	0.2668	0.2514	0.2531	0.2733	0.2471	0.2690	0.2405	0.2624	0.2449	0.2602
84.0	0.2472	0.2405	0.2494	0.2681	0.2404	0.2559	0.2316	0.2515	0.2361	0.2493
87.0	0.2166	0.2164	0.2381	0.2559	0.2009	0.2167	0.1878	0.2144	0.2074	0.2144
90.0	0.1990	0.1990	0.1684	0.1749	0.1684	0.1705	0.1684	0.1727	0.1727	0.1727
G/C	300.0	315.0	330.0	345.0						
0.0	33836	33830	33751	33729						
3.0	32440	32174	32075	31858						
6.0	27725	27166	26985	26538						
9.0	20198	19558	19363	18916						
12.0	13272	12621	12685	12219						
15.0	7992	7617	7614	7359						
18.0	4587	4353	4351	4164						
21.0	2533	2392	2372	2268						

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	1453	1343	1325	1279
27.0	883.1	845.3	836.2	820.4
30.0	615.2	599.0	585.5	575.3
33.0	457.9	444.9	437.9	433.2
36.0	355.4	347.8	345.4	341.4
39.0	265.6	261.7	262.8	260.3
42.0	195.0	191.8	193.0	190.7
45.0	137.5	134.6	137.0	134.7
48.0	91.75	90.46	91.29	90.75
51.0	59.10	57.54	58.74	58.49
54.0	32.92	31.81	32.81	32.82
57.0	20.12	19.63	19.94	19.88
60.0	13.60	13.24	13.51	13.49
63.0	8.742	8.551	8.795	8.774
66.0	5.068	5.034	5.248	5.226
69.0	2.338	2.420	2.601	2.560
72.0	0.6021	0.7458	0.8351	0.8116
75.0	0.2579	0.2756	0.2557	0.2865
78.0	0.2426	0.2581	0.2443	0.2690
81.0	0.2361	0.2524	0.2435	0.2651
84.0	0.2273	0.2440	0.2426	0.2594
87.0	0.1943	0.2232	0.2206	0.2537
90.0	0.1684	0.1684	0.1684	0.1793

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 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Meng Yongjian  
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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: