

GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Spotlight KENZO Series K1X70-18W-930-25D



Light Output Ratio:	100.0%	
Luminaire Power:	20.26 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2017-05-19

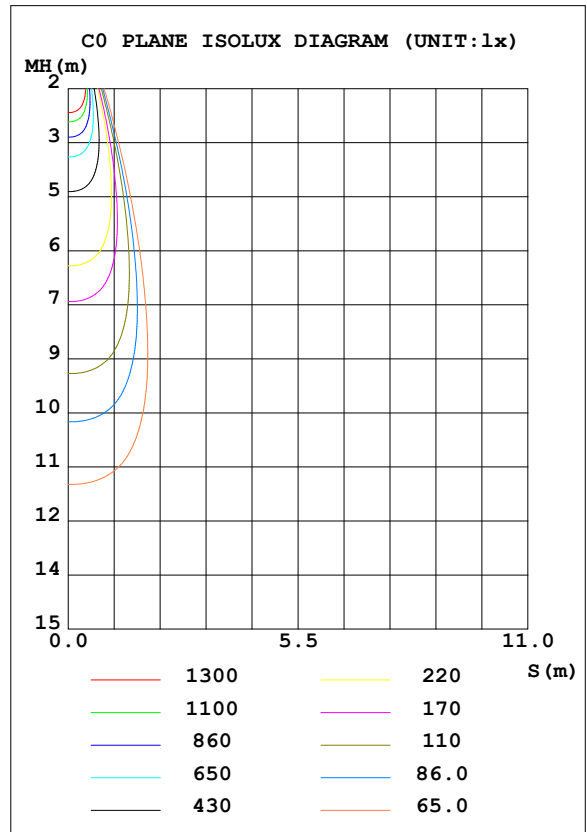
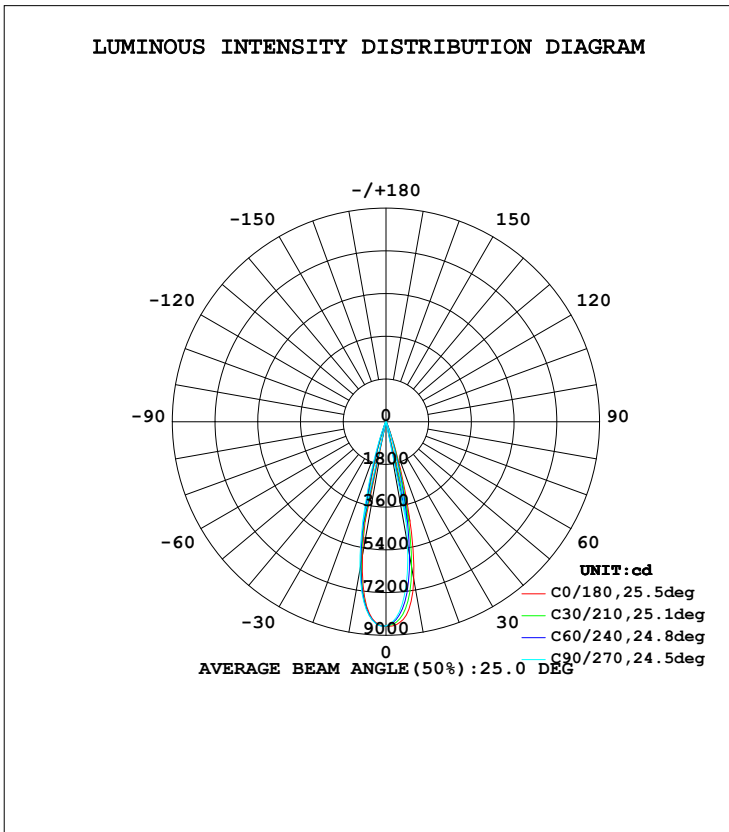
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity: 52%
Test Distance: 5.850m [K=1.0000]
Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
NAME: K1X70-18W-930-25D	TYPE:Spotlight	SERIAL No.:
SPEC.:3000K	DIM.: φ110mm*H138mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.12 lm/W			
MODEL	CITIZEN-3000K	I _{max} (cd)	8624	S/MH (C0/180)	0.37
NOMINAL POWER (W)	21	LOR (%)	100.0	S/MH (C90/270)	0.41
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	1643.5	η UP, DN (C0-180)	0.0, 47.1
NOMINAL FLUX (lm)	1643.47	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 52.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Meng Yongjian
 Test Date: 2017-05-19

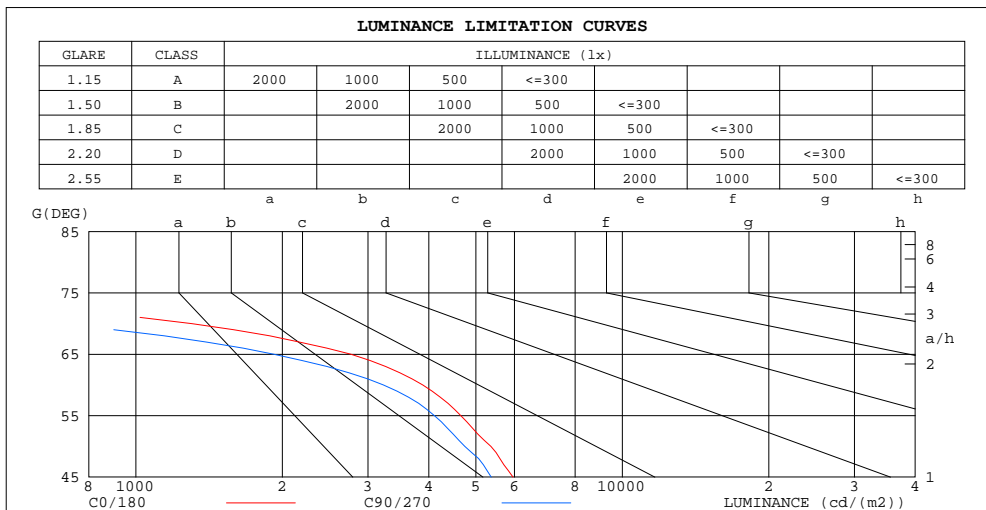
γ Range: 0 - 90DEG
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 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 52%
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**ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES**

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	6746	6050	5275	5179	5735	5997	6330	6735	0- 10	707.6	707.6	43.1,43.1
20	874.0	669.9	519.7	438.1	471.6	540.2	789.9	884.0	10- 20	731.6	1439	87.6,87.6
30	110.1	97.41	86.13	81.01	86.29	94.93	115.6	102.8	20- 30	104.0	1543	93.9,93.9
40	50.14	46.19	43.82	39.81	43.16	44.28	49.22	47.02	30- 40	40.30	1583	96.3,96.3
50	32.79	31.09	28.98	26.23	28.07	29.71	32.67	30.97	40- 50	28.81	1612	98.1,98.1
60	18.46	17.73	15.32	14.12	14.41	16.51	18.94	18.67	50- 60	21.02	1633	99.4,99.4
70	4.236	3.490	2.128	1.568	1.876	2.686	4.013	4.723	60- 70	9.323	1643	99.9,99.9
80	0.1488	0.1179	0.1335	0.1027	0.1027	0.1291	0.1157	0.1466	70- 80	0.7573	1643	100,100
90	0.0590	0.0590	0.0612	0.0612	0.0634	0.0590	0.0612	0.0634	80- 90	0.0888	1643	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	108	101
80	90	81
75	154	86
70	1304	655
65	2766	1921
60	3887	3227
55	4655	4109
50	5370	4746
45	5961	5375

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Meng Yongjian
Test Date:2017-05-19

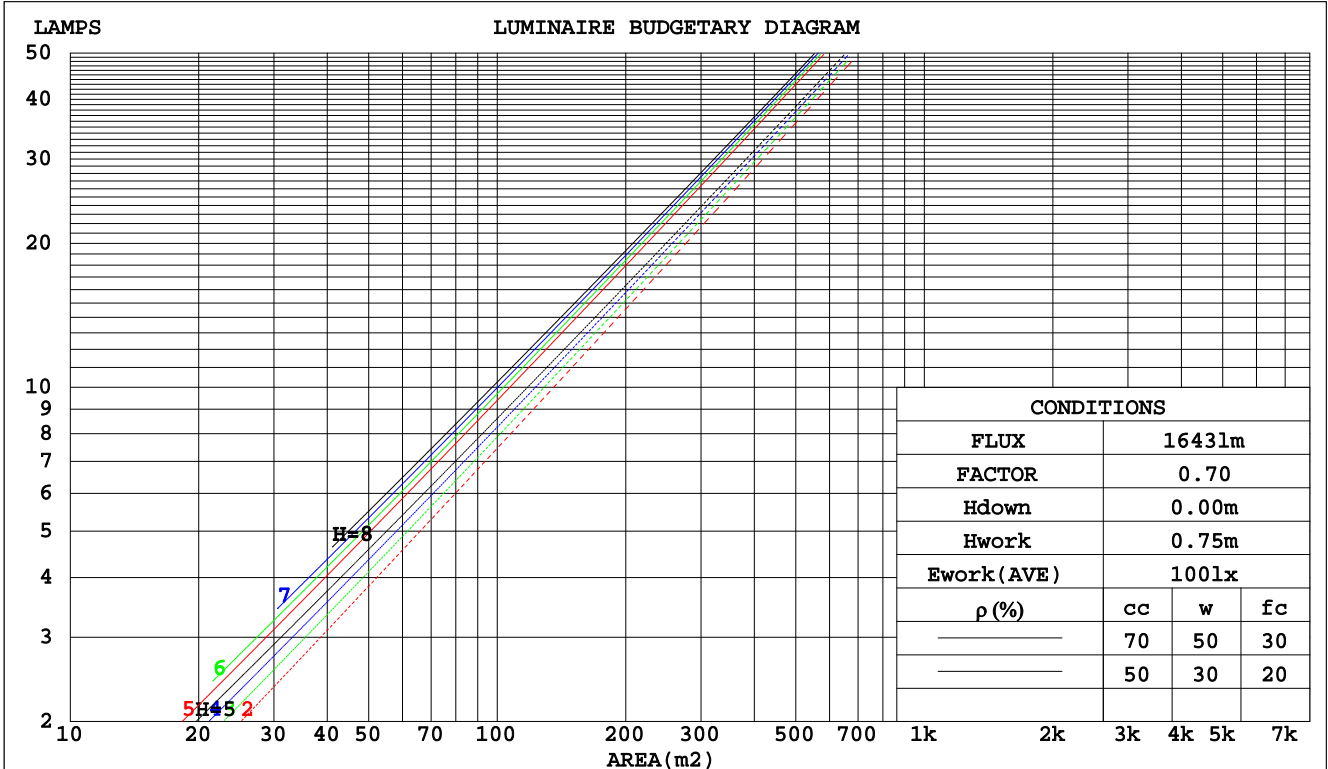
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 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:52%
Test Distance:5.850m [K=1.0000]
Remarks:

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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
NAME: K1X70-18W-930-25D	TYPE:Spotlight	SERIAL No.:
SPEC.:3000K	DIM.: φ110mm*H138mm	
MFR.: NEKO LIGHTING AG		

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															
	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	1.02	1.00	.99	.99	.97
2.0	1.08	1.05	1.03	1.06	1.04	1.02	1.03	1.01	.99	1.00	.99	.97	.98	.97	.95	.94
3.0	1.04	1.00	.98	1.02	.99	.97	1.00	.97	.95	.98	.96	.94	.96	.94	.92	.91
4.0	1.00	.96	.93	.99	.96	.93	.97	.94	.92	.95	.93	.91	.94	.91	.90	.89
5.0	.97	.93	.90	.96	.92	.90	.94	.91	.89	.93	.90	.88	.91	.89	.87	.86
6.0	.94	.90	.87	.93	.89	.87	.92	.89	.86	.91	.88	.86	.89	.87	.85	.84
7.0	.91	.87	.85	.91	.87	.84	.90	.86	.84	.89	.86	.84	.88	.85	.83	.82
8.0	.89	.85	.82	.88	.85	.82	.87	.84	.82	.87	.84	.82	.86	.83	.81	.80
9.0	.87	.83	.80	.86	.83	.80	.85	.82	.80	.85	.82	.80	.84	.81	.79	.79
10.0	.85	.81	.78	.84	.81	.78	.84	.80	.78	.83	.80	.78	.82	.80	.78	.77



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Temperature:25.3DEG
Operators:Meng Yongjian
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γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:52%
Test Distance:5.850m [K=1.0000]
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WEC AND CCEC

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SPEC.:3000K	DIM.: φ110mm*H138mm	
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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	.133	.075	.024	.126	.072	.023	.114	.065	.021	.102	.059	.019	.092	.053	.017	
2.0	.123	.067	.021	.117	.065	.020	.107	.059	.018	.098	.055	.017	.089	.050	.016	
3.0	.114	.061	.018	.109	.058	.018	.101	.055	.017	.093	.051	.016	.086	.047	.015	
4.0	.106	.055	.016	.102	.053	.016	.095	.050	.015	.089	.048	.014	.082	.045	.014	
5.0	.099	.051	.015	.096	.049	.014	.090	.047	.014	.084	.045	.013	.079	.042	.013	
6.0	.093	.047	.013	.091	.046	.013	.086	.044	.013	.081	.042	.012	.076	.040	.012	
7.0	.088	.044	.012	.086	.043	.012	.081	.041	.012	.077	.040	.012	.073	.038	.011	
8.0	.084	.041	.012	.082	.040	.011	.078	.039	.011	.074	.038	.011	.071	.036	.011	
9.0	.080	.039	.011	.078	.038	.011	.074	.037	.010	.071	.036	.010	.068	.035	.010	
10.0	.076	.036	.010	.074	.036	.010	.071	.035	.010	.069	.034	.010	.066	.033	.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	.134	.113	.096	.115	.098	.084	.079	.068	.059	.046	.040	.035	.015	.013	.011	
4.0	.122	.098	.080	.104	.085	.069	.072	.059	.049	.041	.034	.029	.013	.011	.009	
5.0	.111	.085	.067	.095	.074	.058	.066	.052	.041	.038	.030	.024	.012	.010	.008	
6.0	.102	.075	.056	.087	.065	.049	.060	.046	.035	.035	.027	.021	.011	.009	.007	
7.0	.094	.067	.048	.081	.058	.042	.056	.041	.030	.032	.024	.018	.010	.008	.006	
8.0	.087	.060	.042	.075	.052	.036	.052	.037	.026	.030	.022	.015	.010	.007	.005	
9.0	.081	.054	.036	.070	.047	.032	.048	.033	.022	.028	.020	.013	.009	.006	.004	
10.0	.076	.050	.032	.065	.043	.028	.045	.030	.020	.026	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Meng Yongjian
 Test Date:2017-05-19

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:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
NAME: K1X70-18W-930-25D	TYPE:Spotlight	SERIAL No.:
SPEC.:3000K	DIM.: φ110mm*H138mm	
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	9.9	10.5	10.1	10.7	10.8	9.2	9.8	9.4	10.0	10.1
3H	10.2	10.8	10.4	11.0	11.1	9.3	9.9	9.5	10.1	10.3
4H	10.1	10.7	10.4	10.9	11.1	9.2	9.8	9.5	10.0	10.2
6H	10.0	10.6	10.3	10.8	11.0	9.2	9.7	9.4	9.9	10.1
8H	10.0	10.5	10.3	10.7	11.0	9.1	9.6	9.4	9.9	10.1
12H	10.0	10.4	10.3	10.7	11.0	9.1	9.5	9.4	9.8	10.1
4H 2H	10.1	10.7	10.4	10.9	11.1	9.5	10.1	9.8	10.3	10.5
3H	10.4	10.9	10.7	11.1	11.4	9.6	10.1	9.9	10.3	10.6
4H	10.3	10.7	10.6	11.0	11.3	9.5	10.0	9.8	10.2	10.5
6H	10.2	10.6	10.6	10.9	11.3	9.4	9.8	9.8	10.1	10.5
8H	10.1	10.5	10.5	10.9	11.2	9.3	9.7	9.7	10.1	10.4
12H	10.1	10.4	10.5	10.8	11.2	9.3	9.6	9.7	10.0	10.4
8H 4H	10.2	10.5	10.5	10.9	11.2	9.4	9.7	9.7	10.1	10.4
6H	10.0	10.3	10.5	10.7	11.1	9.3	9.6	9.7	9.9	10.4
8H	10.0	10.3	10.4	10.7	11.1	9.2	9.5	9.6	9.9	10.3
12H	9.9	10.2	10.4	10.6	11.1	9.1	9.4	9.6	9.8	10.3
12H 4H	10.1	10.4	10.5	10.8	11.2	9.3	9.7	9.7	10.0	10.4
6H	10.0	10.3	10.4	10.7	11.1	9.2	9.5	9.6	9.9	10.3
8H	9.9	10.2	10.4	10.6	11.1	9.1	9.4	9.6	9.8	10.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 1.0					+ 0.7 / - 1.1				
1.5H	+ 0.3 / - 0.9					+ 0.3 / - 0.8				
2.0H	+ 1.1 / - 1.7					+ 1.1 / - 2.0				

CIE Pub.117 Corrected 1643 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.7)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
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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]
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GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
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SPEC.:3000K	DIM.: φ110mm*H138mm	
MFR.: NEKO LIGHTING AG		

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	89	83	80	89	83	80	88	83	79	76
0.80	96	91	87	96	91	87	95	90	87	83
1.00	100	95	92	100	95	92	98	95	91	87
1.25	104	99	96	103	99	96	101	98	95	91
1.50	107	102	99	106	102	99	103	100	98	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	104	102	96
3.00	112	109	106	110	108	105	107	105	103	97
4.00	114	112	110	112	110	108	109	107	105	98
5.00	115	113	112	113	112	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

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ISOCANDELA DIAGRAM

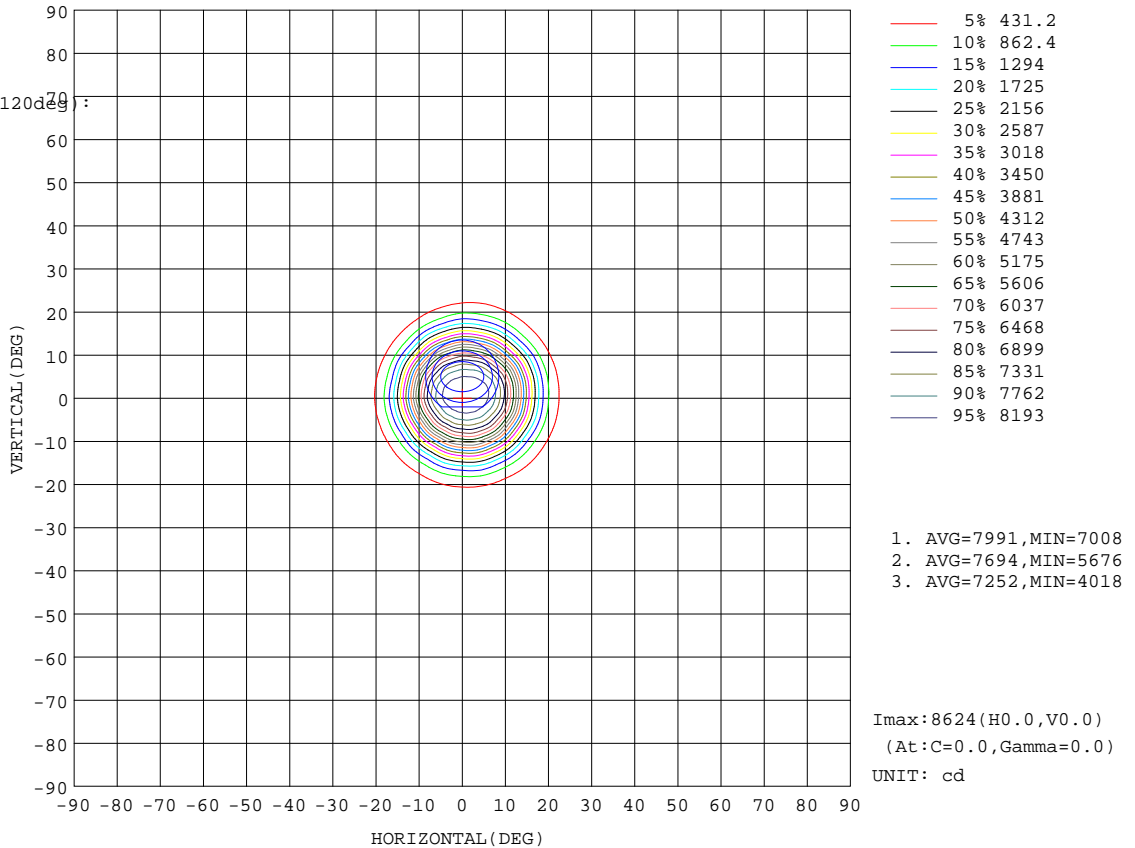
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SPEC.:3000K	DIM.: φ110mm*H138mm	
MFR.: NEKO LIGHTING AG		

Conical surface Flux(90deg):

1598.7 lm
%lum = 97.3%
%lamp = 97.3%

Conical surface Flux(120deg):

1633.3 lm
%lum = 99.4%
%lamp = 99.4%



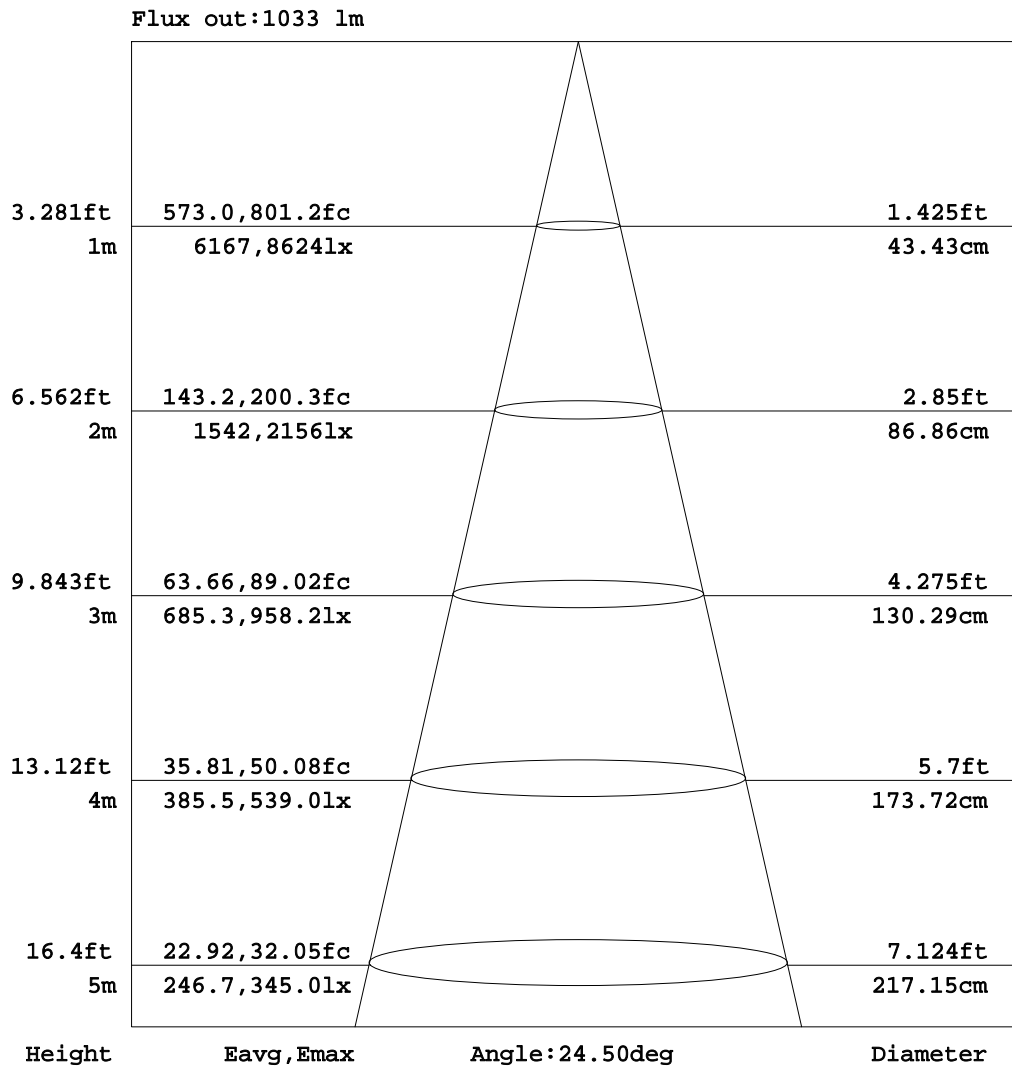
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AAI Figure

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
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SPEC.:3000K	DIM.: φ110mm*H138mm	
MFR.: NEKO LIGHTING AG		



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

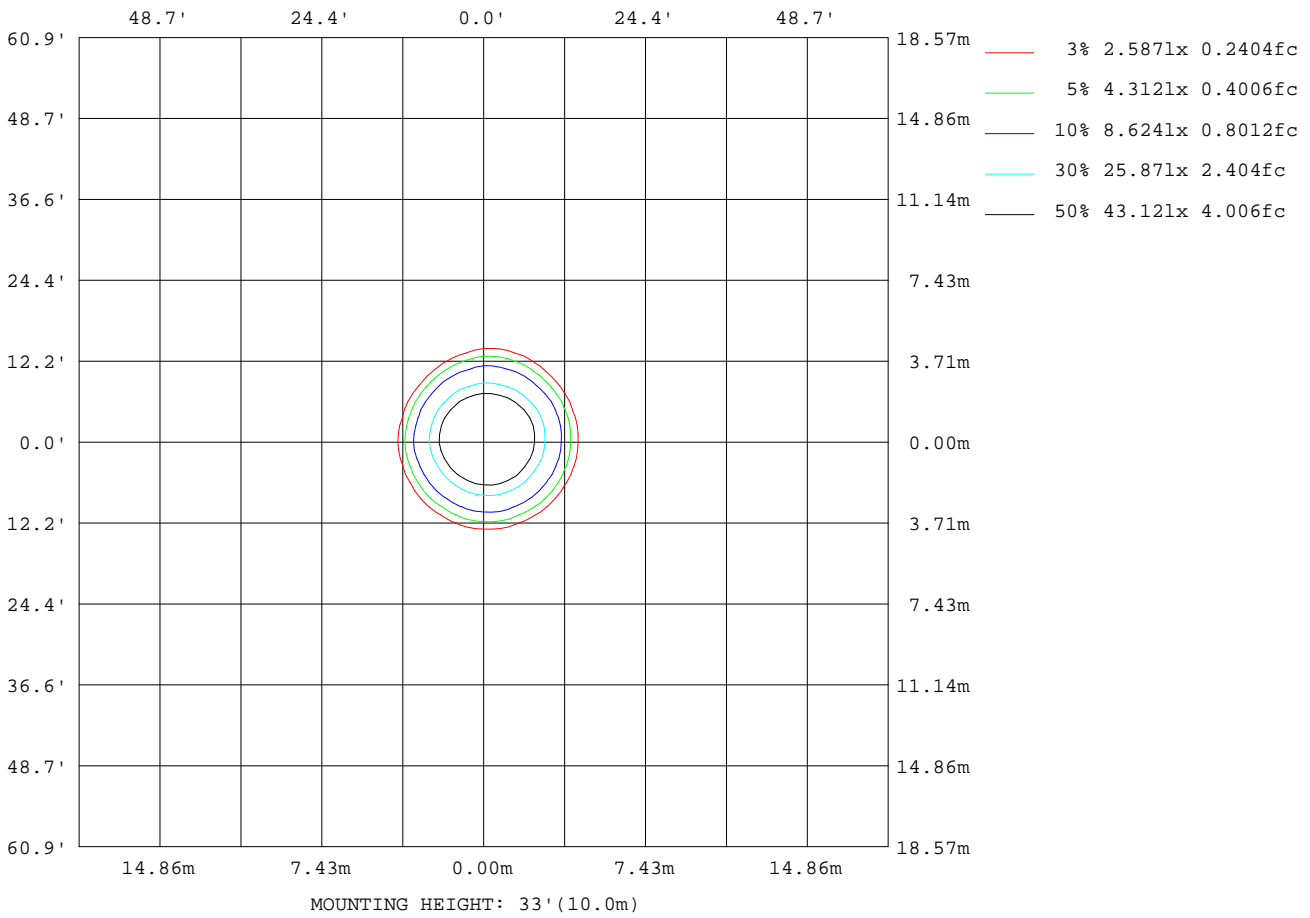
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ISOLUX DIAGRAM

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
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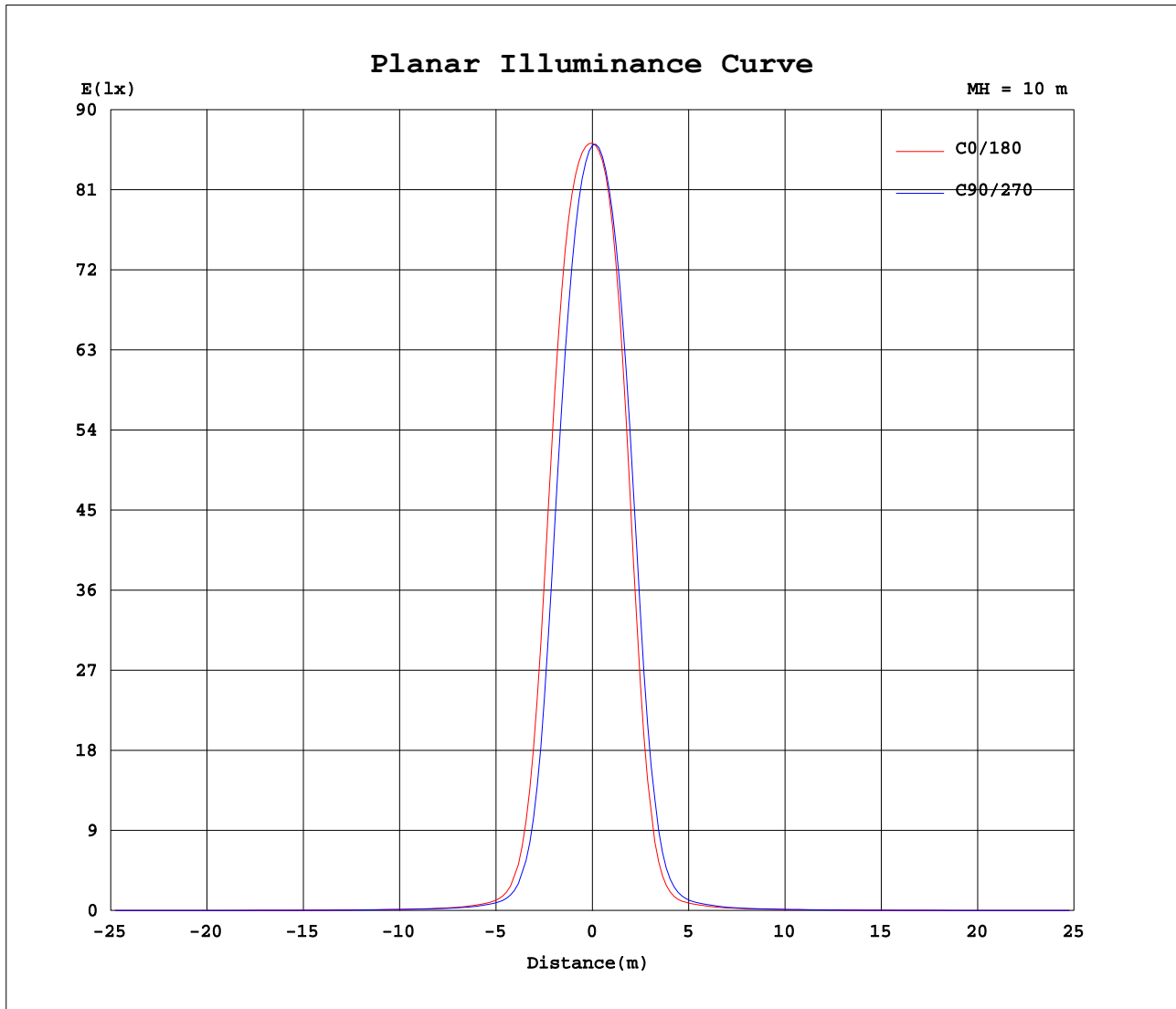


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Planar Illuminance Curve



C Range: 0 - 360DEG
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 Operators: Meng Yongjian
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γ Range: 0 - 90DEG
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 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
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 Remarks:

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
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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	8624	8618	8613	8611	8605	8607	8600	8605	8599	8603	8598	8601	8624	8618	8613	8611	8605	8607	8600
5	8358	8284	8150	8063	7920	7851	7746	7759	7721	7807	7847	7978	8103	8124	8175	8143	8168	8152	8195
10	6746	6578	6242	6050	5715	5549	5275	5204	5070	5179	5210	5456	5735	5791	5993	5997	6157	6152	6330
15	3315	3163	2824	2673	2379	2260	2028	1952	1800	1843	1831	1993	2177	2195	2375	2425	2670	2730	2978
20	874	827	725	670	580	553	520	479	436	438	421	440	472	486	489	540	592	659	790
25	218	215	194	184	167	160	152	149	144	145	136	139	141	139	144	148	165	184	217
30	110	109	102	97.4	91.8	89.2	86.1	83.3	81.0	81.0	81.4	82.0	86.3	88.4	91.6	94.9	100	105	116
35	68.1	66.5	64.5	62.7	60.3	58.8	57.1	55.8	54.0	53.3	54.1	55.3	56.8	57.4	59.1	59.9	62.8	64.9	68.5
40	50.1	49.3	47.6	46.2	45.7	45.1	43.8	43.1	41.3	39.8	41.0	42.1	43.2	43.4	44.2	44.3	46.4	47.9	49.2
45	40.0	39.6	38.1	36.7	37.1	37.1	36.1	35.9	34.6	32.9	33.8	34.7	35.3	35.6	36.0	35.5	36.9	38.5	39.2
50	32.8	32.6	31.7	31.1	29.9	29.7	29.0	28.7	27.7	26.2	26.6	27.5	28.1	28.1	29.1	29.7	30.1	31.4	32.7
55	25.4	25.6	25.0	24.8	23.3	22.9	22.4	22.1	21.4	20.6	20.4	21.0	21.4	21.4	22.6	23.7	23.9	24.7	26.0
60	18.5	18.6	18.0	17.7	16.5	16.0	15.3	15.1	14.4	14.1	13.8	14.0	14.4	14.6	15.6	16.5	17.1	17.9	18.9
65	11.1	11.0	10.4	9.92	8.89	8.38	7.71	7.47	6.96	6.85	6.60	6.75	7.12	7.39	8.08	8.66	9.46	10.0	10.9
70	4.24	4.18	3.76	3.49	2.93	2.62	2.13	1.94	1.60	1.57	1.44	1.61	1.88	2.02	2.41	2.69	3.17	3.49	4.01
75	0.38	0.35	0.28	0.25	0.24	0.22	0.21	0.19	0.19	0.18	0.19	0.18	0.18	0.19	0.18	0.21	0.20	0.24	0.31
80	0.15	0.13	0.14	0.12	0.13	0.11	0.13	0.11	0.12	0.10	0.12	0.10	0.10	0.12	0.10	0.13	0.11	0.14	0.12
85	0.09	0.07	0.09	0.06	0.08	0.06	0.08	0.07	0.08	0.06	0.08	0.07	0.06	0.08	0.07	0.08	0.06	0.09	0.07
90	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	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:2017-05-19

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.7V I:0.0978A P:20.26W PF:0.9380 Lamp Flux:1643.47x1 lm		
NAME: K1X70-18W-930-25D	TYPE:Spotlight	SERIAL No.:
SPEC.:3000K	DIM.: φ110mm*H138mm	
MFR.: NEKO LIGHTING AG		

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	8605	8599	8603	8598	8601														
5	8224	8305	8351	8411	8406														
10	6397	6632	6735	6948	6917														
15	3065	3315	3393	3621	3541														
20	840	893	884	957	951														
25	230	233	221	227	222														
30	118	116	103	107	110														
35	69.3	69.7	65.7	67.6	68.4														
40	50.1	50.4	47.0	49.5	50.5														
45	40.1	40.1	37.2	39.3	40.4														
50	33.3	33.4	31.0	32.4	33.4														
55	26.4	26.4	24.5	25.2	25.7														
60	19.3	19.4	18.7	18.8	18.8														
65	11.3	11.8	11.7	11.7	11.5														
70	4.28	4.64	4.72	4.74	4.56														
75	0.36	0.39	0.41	0.42	0.40														
80	0.14	0.12	0.15	0.13	0.15														
85	0.09	0.07	0.09	0.07	0.09														
90	0.06	0.06	0.06	0.06	0.07														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Meng Yongjian
Test Date:2017-05-19
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]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	8624	8618	8613	8611	8605	8607	8600	8605	8599	8603
3.0	8555	8520	8452	8406	8337	8312	8260	8272	8256	8303
6.0	8191	8091	7917	7806	7625	7523	7383	7392	7339	7445
9.0	7241	7089	6786	6613	6301	6155	5901	5852	5732	5863
12.0	5506	5323	4927	4739	4378	4205	3911	3820	3651	3739
15.0	3315	3163	2824	2673	2379	2260	2028	1952	1800	1843
18.0	1588	1546	1311	1215	1053	995.5	887.8	849.7	769.6	780.1
21.0	636.0	609.8	562.9	497.7	433.9	414.8	375.4	363.1	330.9	332.7
24.0	271.8	268.5	240.6	227.5	203.7	194.0	181.3	177.9	168.6	170.1
27.0	153.9	152.5	139.5	135.8	122.9	120.4	118.0	115.9	113.4	114.7
30.0	110.1	108.5	102.2	97.41	91.78	89.18	86.13	83.32	81.04	81.01
33.0	82.06	79.89	75.94	73.57	69.73	67.19	65.32	63.10	61.99	60.66
36.0	63.62	61.83	59.73	58.61	56.79	55.47	53.91	52.69	50.97	50.02
39.0	52.88	51.96	50.25	48.96	48.15	47.39	46.07	45.19	43.36	42.01
42.0	45.30	44.60	43.00	41.51	41.60	41.39	40.31	39.98	38.34	36.62
45.0	40.04	39.62	38.09	36.71	37.09	37.12	36.10	35.93	34.57	32.91
48.0	35.61	35.37	34.30	33.42	33.02	33.08	32.19	31.89	30.62	29.23
51.0	31.06	31.12	30.28	29.75	28.46	28.18	27.56	27.33	26.43	25.00
54.0	26.73	26.92	26.38	26.04	24.60	24.19	23.70	23.45	22.66	21.73
57.0	22.67	22.86	22.32	22.10	20.71	20.23	19.73	19.45	18.66	18.20
60.0	18.46	18.56	18.03	17.73	16.49	15.96	15.32	15.06	14.38	14.12
63.0	14.08	14.08	13.47	13.05	11.93	11.40	10.66	10.38	9.731	9.623
66.0	9.540	9.463	8.842	8.423	7.537	7.077	6.419	6.187	5.688	5.627
69.0	5.410	5.366	4.880	4.576	3.960	3.595	3.065	2.830	2.496	2.428
72.0	2.188	2.126	1.770	1.576	1.156	0.9249	0.6274	0.5079	0.4403	0.4312
75.0	0.3792	0.3488	0.2797	0.2510	0.2440	0.2162	0.2126	0.1879	0.1949	0.1770
78.0	0.1817	0.1573	0.1751	0.1529	0.1642	0.1442	0.1598	0.1333	0.1467	0.1289
81.0	0.1335	0.1092	0.1248	0.1027	0.1204	0.0983	0.1226	0.0983	0.1116	0.0917
84.0	0.0963	0.0721	0.0920	0.0699	0.0876	0.0699	0.0941	0.0678	0.0876	0.0634
87.0	0.0722	0.0568	0.0701	0.0590	0.0679	0.0590	0.0744	0.0612	0.0700	0.0612
90.0	0.0590	0.0568	0.0590	0.0590	0.0612	0.0590	0.0612	0.0612	0.0612	0.0612
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	8598	8601	8624	8618	8613	8611	8605	8607	8600	8605
3.0	8323	8388	8461	8470	8493	8485	8498	8486	8506	8513
6.0	7488	7654	7816	7845	7909	7882	7920	7899	7961	7995
9.0	5897	6145	6388	6440	6602	6606	6722	6708	6839	6903
12.0	3747	3975	4237	4303	4537	4581	4804	4841	5082	5165
15.0	1831	1993	2177	2195	2375	2425	2670	2730	2978	3065
18.0	761.8	816.8	894.4	883.6	958.3	994.1	1152	1236	1458	1487
21.0	314.9	326.1	348.5	339.1	359.1	373.2	430.3	510.4	587.2	626.6
24.0	158.7	158.0	165.5	163.6	171.2	177.1	199.7	222.8	267.6	285.7
27.0	110.5	109.3	113.6	113.8	115.1	117.1	128.3	137.6	157.4	164.7
30.0	81.41	81.96	86.29	88.45	91.61	94.93	100.0	105.5	115.6	118.5
33.0	62.05	62.64	64.86	65.81	67.95	69.84	73.88	77.40	83.91	84.84
36.0	51.00	52.15	53.57	54.06	55.60	56.18	58.89	60.42	63.32	64.64
39.0	43.17	44.37	45.50	45.69	46.66	46.89	49.15	50.65	52.19	53.11
42.0	37.82	38.85	39.61	39.94	40.44	40.13	41.83	43.36	44.31	45.13
45.0	33.83	34.67	35.30	35.63	36.00	35.47	36.86	38.50	39.24	40.10
48.0	29.62	30.59	31.21	31.41	32.18	32.16	32.97	34.42	35.27	35.98
51.0	25.30	26.17	26.70	26.73	27.77	28.54	28.76	29.85	31.21	31.83
54.0	21.65	22.33	22.78	22.78	23.95	25.02	25.12	25.96	27.27	27.78
57.0	17.93	18.29	18.71	18.79	19.93	21.00	21.32	22.12	23.33	23.75
60.0	13.81	14.00	14.41	14.61	15.63	16.51	17.14	17.86	18.94	19.31
63.0	9.296	9.470	9.917	10.24	11.04	11.79	12.56	13.24	14.17	14.59
66.0	5.379	5.553	5.922	6.185	6.813	7.312	8.017	8.527	9.331	9.739
69.0	2.290	2.444	2.749	2.922	3.380	3.693	4.249	4.612	5.203	5.507
72.0	0.4108	0.4247	0.4937	0.5684	0.8063	1.005	1.330	1.574	1.993	2.172
75.0	0.1927	0.1770	0.1769	0.1926	0.1791	0.2060	0.2009	0.2377	0.3136	0.3610
78.0	0.1466	0.1310	0.1289	0.1466	0.1289	0.1554	0.1398	0.1641	0.1485	0.1707
81.0	0.1094	0.0917	0.0961	0.1116	0.0917	0.1160	0.1005	0.1225	0.1027	0.1269
84.0	0.0832	0.0656	0.0677	0.0854	0.0656	0.0854	0.0699	0.0919	0.0721	0.0985
87.0	0.0700	0.0590	0.0634	0.0722	0.0590	0.0722	0.0590	0.0744	0.0634	0.0788
90.0	0.0590	0.0590	0.0634	0.0634	0.0612	0.0590	0.0590	0.0612	0.0612	0.0634
G/C	300.0	315.0	330.0	345.0						
0.0	8599	8603	8598	8601						
3.0	8541	8552	8571	8563						
6.0	8114	8181	8267	8264						
9.0	7125	7226	7407	7389						
12.0	5411	5517	5765	5714						
15.0	3315	3393	3621	3541						
18.0	1610	1626	1761	1733						
21.0	660.8	643.8	698.7	689.0						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Meng Yongjian

Test Date: 2017-05-19

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	291.8	277.7	290.3	283.7
27.0	163.7	151.8	155.7	153.6
30.0	115.8	102.8	107.3	109.5
33.0	84.91	78.27	80.83	82.66
36.0	64.70	60.67	62.73	63.87
39.0	53.49	50.00	52.29	53.20
42.0	45.18	42.19	44.51	45.60
45.0	40.05	37.21	39.26	40.40
48.0	36.04	33.37	35.01	36.13
51.0	31.82	29.43	30.72	31.64
54.0	27.70	25.59	26.45	27.05
57.0	23.64	22.30	22.64	22.96
60.0	19.40	18.67	18.79	18.75
63.0	14.91	14.64	14.68	14.46
66.0	10.18	10.20	10.20	9.966
69.0	5.915	5.966	6.009	5.798
72.0	2.490	2.546	2.602	2.430
75.0	0.3875	0.4066	0.4160	0.4039
78.0	0.1550	0.1751	0.1594	0.1816
81.0	0.1070	0.1335	0.1135	0.1357
84.0	0.0764	0.1007	0.0765	0.1028
87.0	0.0634	0.0788	0.0655	0.0810
90.0	0.0612	0.0634	0.0612	0.0678

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Meng Yongjian
Test Date: 2017-05-19

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: