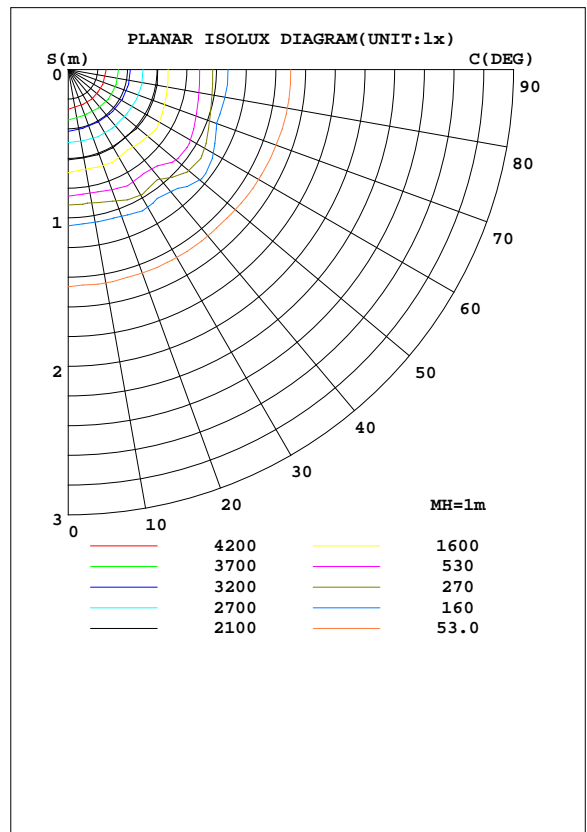
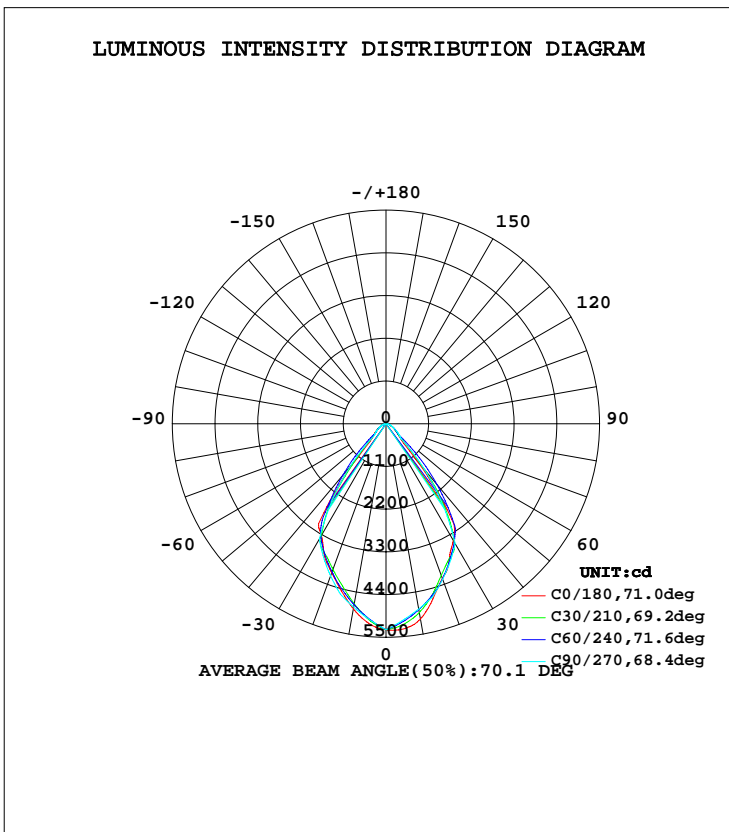


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.77 lm/W			
MODEL	M5-6-80-30-90	I _{max} (cd)	5322	S/MH(C0/180)	0.98
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	0.99
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	6141.5	η UP, DN(C0-180)	0.0, 51.5
NOMINAL FLUX(lm)	6141.48	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 48.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)		η down(%)	100.0	CIBSE SHR MAX	1.05



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

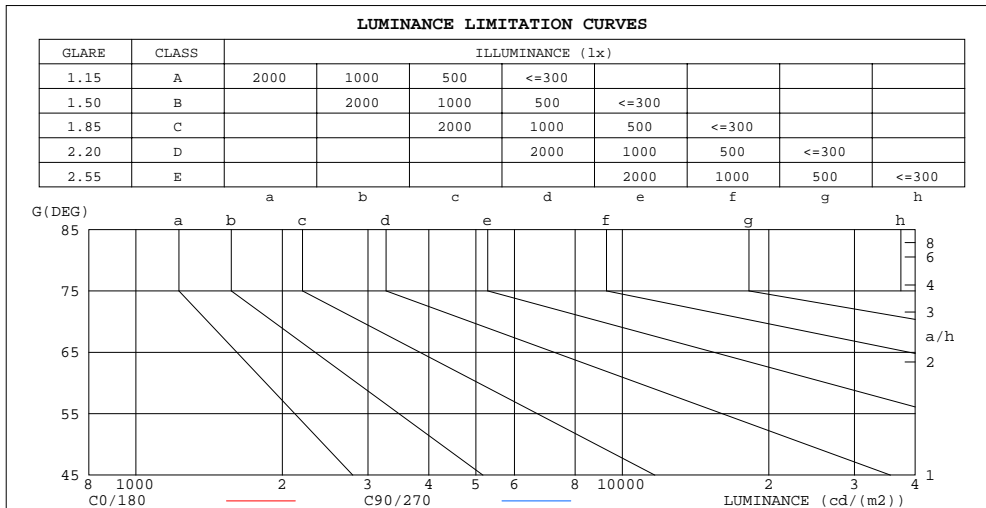
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

EVERFINE 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	$\%lum, lamp$
5	5301	5142	5076	5073	5157	5046	5051	5131	0- 5	124.0	124.0	2.02,2.02
10	5105	4892	4846	4768	4839	4705	4796	4870	5- 10	355.4	479.4	7.81,7.81
15	4670	4581	4616	4457	4454	4346	4541	4496	10- 15	553.2	1033	16.8,16.8
20	4243	4252	4265	4191	4087	4030	4171	4149	15- 20	711.9	1744	28.4,28.4
25	3857	3831	3913	3853	3755	3619	3800	3752	20- 25	833.5	2578	42,42
30	3471	3441	3561	3464	3330	3057	3429	3099	25- 30	910.5	3488	56.8,56.8
35	2853	2819	2556	2690	2787	2095	2428	2256	30- 35	900.7	4389	71.5,71.5
40	1255	1700	1552	1577	1133	965.7	1427	1096	35- 40	678.0	5067	82.5,82.5
45	525.8	819.8	547.8	839.6	487.3	476.7	426.5	516.3	40- 45	366.5	5434	88.5,88.5
50	396.5	430.6	442.7	416.8	375.5	352.6	348.1	369.9	45- 50	195.1	5629	91.6,91.6
55	303.1	302.9	337.6	297.3	292.7	266.6	269.6	270.4	50- 55	145.6	5774	94,94
60	228.4	235.2	232.5	231.7	222.4	206.9	191.2	209.4	55- 60	117.9	5892	95.9,95.9
65	167.9	174.4	183.2	171.9	164.3	152.1	148.5	153.7	60- 65	92.19	5984	97.4,97.4
70	120.3	124.9	134.0	123.4	117.0	106.8	105.8	107.8	65- 70	70.76	6055	98.6,98.6
75	79.14	85.30	84.78	84.94	76.64	70.29	63.10	70.70	70- 75	50.58	6106	99.4,99.4
80	43.64	42.10	0	42.77	41.78	32.01	0	31.90	75- 80	28.37	6134	99.9,99.9
85	12.20	0	0	0	11.28	0	0	0	80- 85	7.095	6141	100,100
90	0.3488	0	0	0	0.2735	0	0	0	85- 90	0.4097	6141	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	116676	0
80	209439	0
75	254801	272957
70	293170	326497
65	330999	361298
60	380666	387427
55	440416	490447
50	514044	573914
45	619613	645589

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2014-08-29

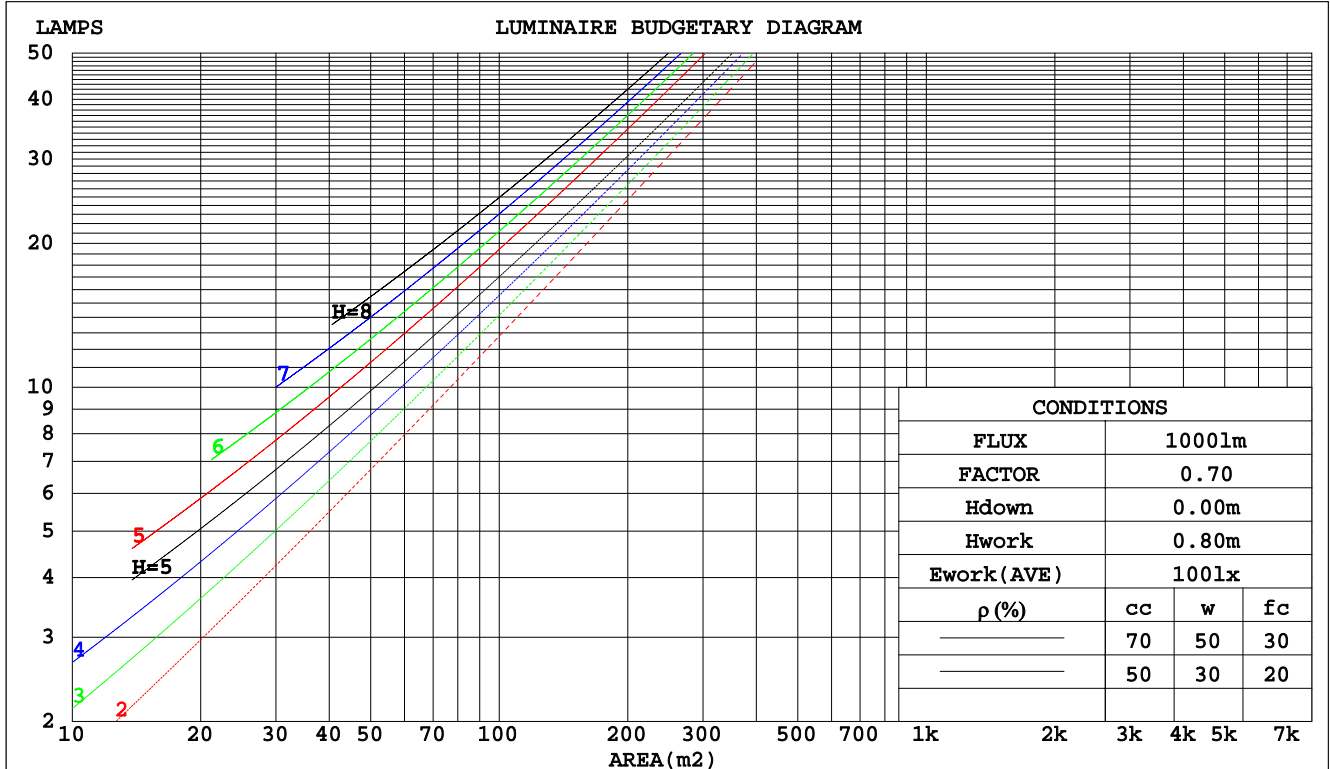
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.288
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc																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	1.09	1.06	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.95	.93	.91
2.0	1.00	.96	.92	.98	.94	.91	.95	.92	.89	.92	.89	.87	.89	.87	.85	.83
3.0	.92	.86	.82	.91	.85	.81	.88	.84	.80	.85	.82	.79	.83	.80	.77	.76
4.0	.85	.79	.74	.84	.78	.73	.82	.76	.72	.79	.75	.72	.77	.74	.71	.69
5.0	.79	.72	.67	.78	.71	.67	.76	.70	.66	.74	.69	.65	.72	.68	.65	.63
6.0	.73	.66	.61	.72	.66	.61	.70	.65	.61	.69	.64	.60	.68	.63	.60	.58
7.0	.68	.61	.56	.67	.61	.56	.66	.60	.56	.65	.59	.56	.63	.59	.55	.54
8.0	.63	.57	.52	.63	.56	.52	.62	.56	.52	.60	.55	.51	.59	.55	.51	.50
9.0	.59	.53	.48	.59	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.46
10.0	.56	.49	.45	.55	.49	.45	.54	.49	.45	.53	.48	.45	.53	.48	.44	.43



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm														
NAME:					TYPE:LED					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.:					SUR.:320mm					PROTECTION ANGLE:				

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	.205	.117	.037	.198	.113	.036	.186	.107	.034	.174	.100	.032	.163	.095	.030	
2.0	.198	.108	.033	.192	.106	.033	.181	.101	.031	.171	.096	.030	.162	.092	.029	
3.0	.188	.100	.030	.183	.098	.030	.174	.094	.029	.165	.091	.028	.157	.087	.027	
4.0	.178	.093	.027	.174	.091	.027	.166	.088	.026	.158	.085	.026	.151	.082	.025	
5.0	.169	.086	.025	.165	.085	.025	.158	.082	.024	.152	.080	.024	.145	.078	.023	
6.0	.161	.081	.023	.157	.079	.023	.151	.077	.023	.145	.075	.022	.139	.073	.022	
7.0	.153	.075	.021	.150	.075	.021	.144	.073	.021	.139	.071	.021	.134	.070	.020	
8.0	.145	.071	.020	.143	.070	.020	.138	.069	.020	.133	.067	.019	.128	.066	.019	
9.0	.139	.067	.019	.136	.066	.019	.132	.065	.018	.127	.064	.018	.123	.063	.018	
10.0	.132	.063	.018	.130	.063	.018	.126	.062	.017	.122	.061	.017	.119	.060	.017	

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.095	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.149	.114	.086	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.139	.099	.069	.120	.086	.060	.082	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.131	.088	.056	.113	.076	.049	.078	.053	.035	.045	.031	.021	.015	.010	.007	
6.0	.124	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.072	.039	.102	.062	.034	.070	.044	.024	.041	.026	.015	.013	.008	.005	
8.0	.112	.066	.034	.097	.057	.030	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.107	.061	.029	.092	.053	.026	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.102	.056	.026	.088	.049	.023	.061	.034	.016	.036	.020	.010	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm										
NAME:					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:320mm			PROTECTION ANGLE:		
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	33.0	34.1	33.2	34.3	34.4	33.9	35.0	34.1	35.1	35.3
3H	33.3	34.3	33.5	34.5	34.7	34.1	35.1	34.4	35.3	35.5
4H	33.4	34.3	33.7	34.6	34.8	34.2	35.2	34.5	35.4	35.6
6H	33.5	34.3	33.8	34.6	34.9	34.2	35.1	34.5	35.3	35.6
8H	33.5	34.3	33.8	34.6	34.8	34.1	35.0	34.4	35.2	35.5
12H	33.4	34.3	33.8	34.5	34.8	34.1	34.9	34.4	35.2	35.5
4H 2H	33.0	34.0	33.3	34.2	34.4	33.8	34.8	34.1	35.0	35.2
3H	33.4	34.3	33.8	34.5	34.8	34.2	35.0	34.5	35.3	35.6
4H	33.6	34.4	34.0	34.7	35.0	34.4	35.1	34.7	35.4	35.8
6H	33.8	34.4	34.2	34.8	35.1	34.4	35.0	34.8	35.4	35.7
8H	33.8	34.4	34.2	34.8	35.2	34.3	34.9	34.7	35.3	35.7
12H	33.8	34.4	34.2	34.7	35.1	34.3	34.8	34.7	35.2	35.6
8H 4H	33.7	34.3	34.1	34.6	35.0	34.4	35.0	34.8	35.4	35.7
6H	33.9	34.4	34.3	34.8	35.2	34.4	34.9	34.8	35.3	35.7
8H	34.0	34.4	34.4	34.8	35.3	34.3	34.8	34.8	35.2	35.6
12H	34.0	34.4	34.5	34.8	35.3	34.3	34.7	34.8	35.1	35.6
12H 4H	33.6	34.2	34.1	34.6	35.0	34.4	34.9	34.8	35.3	35.7
6H	33.9	34.3	34.3	34.7	35.2	34.4	34.8	34.8	35.2	35.7
8H	33.9	34.3	34.4	34.8	35.2	34.3	34.7	34.8	35.1	35.6
Variations with the observer position at spacings:										
S = 1.0H	+ 1.9 / - 2.2					+ 1.9 / - 2.8				
1.5H	+ 3.7 / - 1.8					+ 3.1 / - 2.2				
2.0H	+ 0.8 / - 0.6					+ 0.8 / - 0.8				

CIE Pub.117 Corrected 6141 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.3)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

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	81	73	69	80	73	68	79	73	68	64
0.80	89	82	77	88	81	77	87	81	77	72
1.00	94	88	83	93	87	83	92	87	82	78
1.25	99	93	89	98	92	88	96	91	87	83
1.50	102	97	93	101	96	92	99	94	91	86
2.00	106	101	97	104	100	96	102	98	95	89
2.50	108	103	100	106	102	99	103	100	97	91
3.00	110	106	103	108	104	102	105	102	99	93
4.00	112	109	106	110	107	105	107	104	102	95
5.00	114	111	109	112	109	107	108	106	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

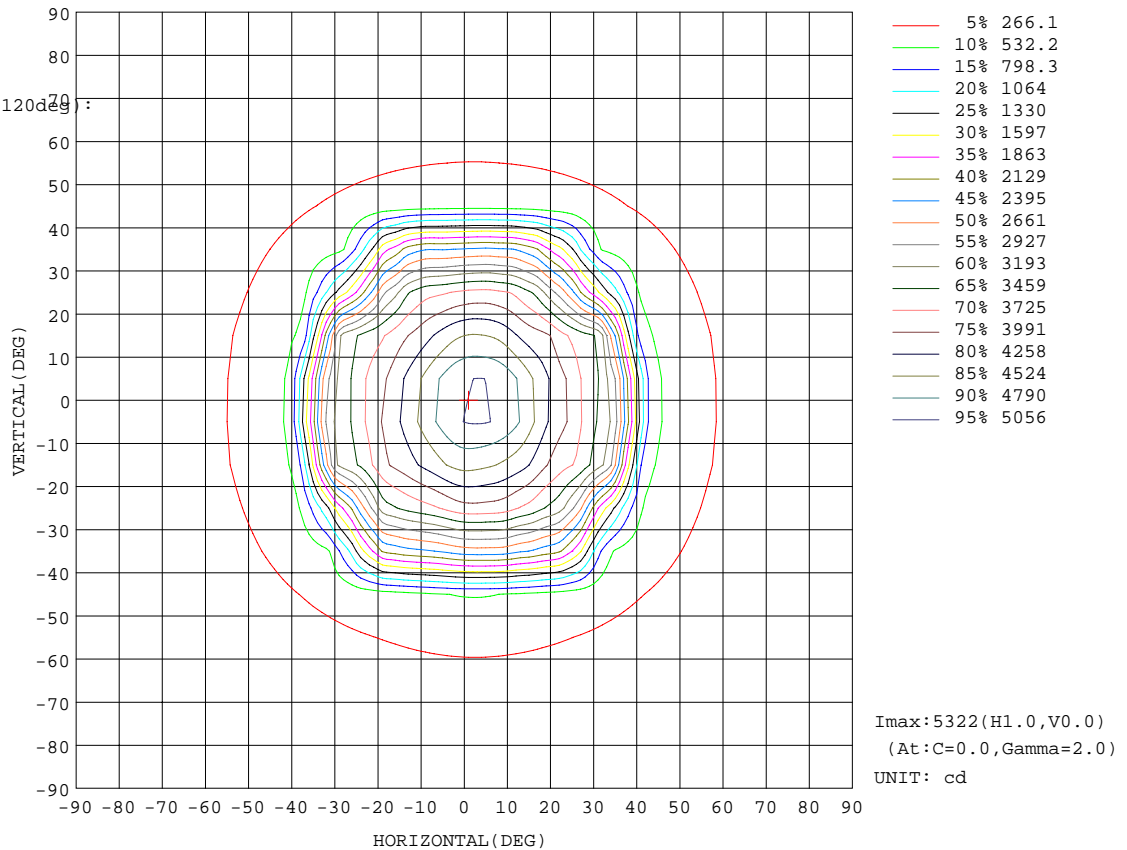
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

Conical surface Flux(90deg):
 5433.6 lm
 %lum = 88.5%
 %lamp = 88.5%

Conical surface Flux(120deg):
 5892.1 lm
 %lum = 95.9%
 %lamp = 95.9%



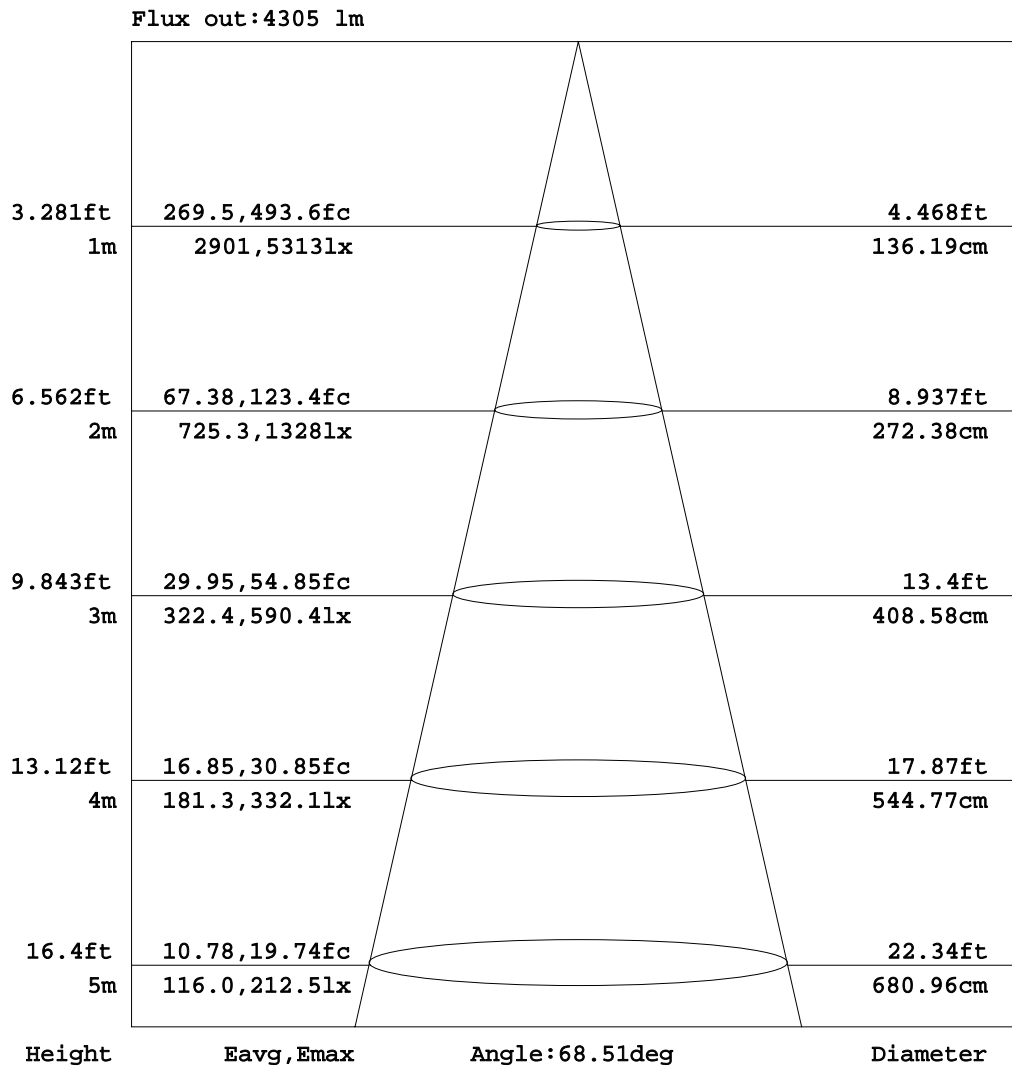
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:



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

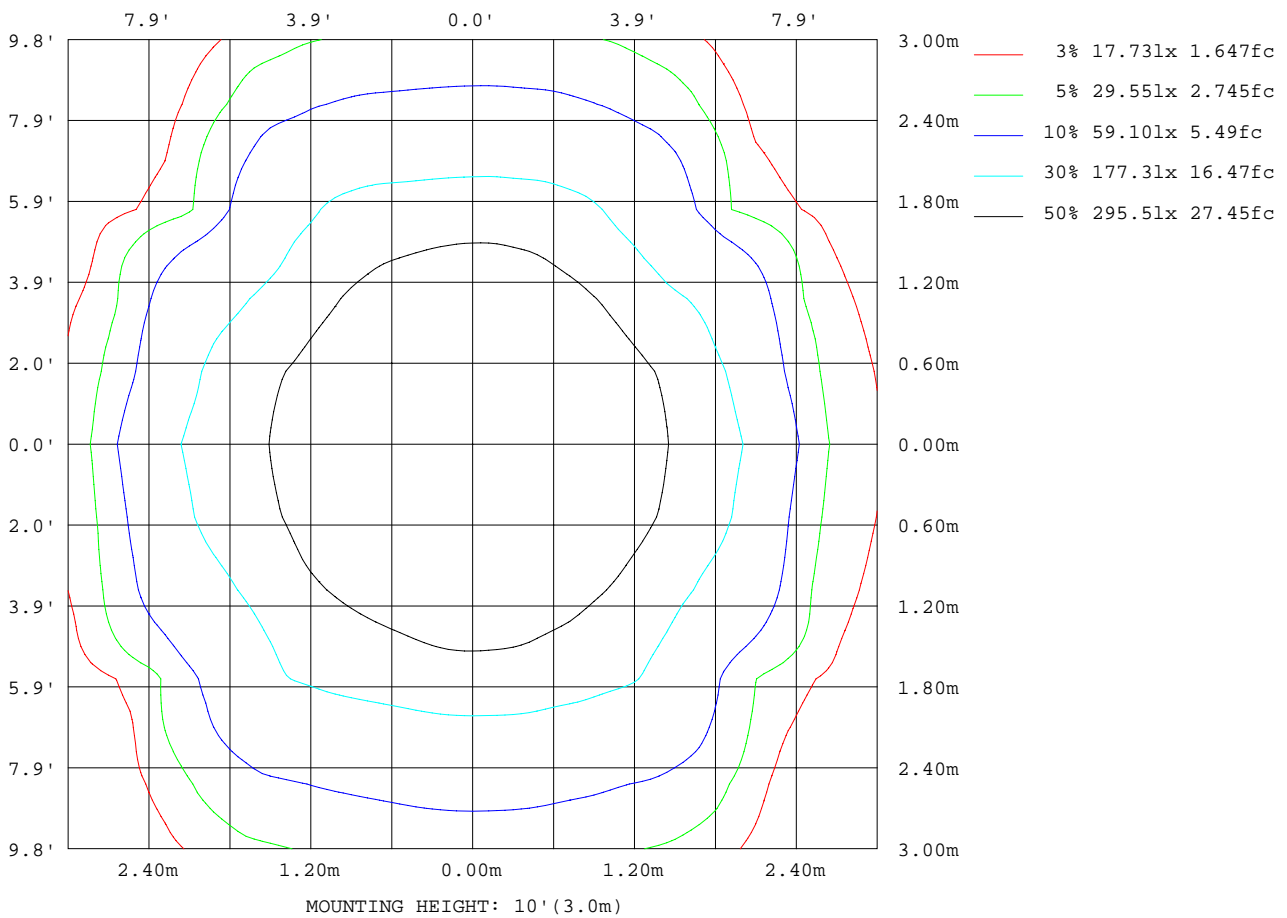
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity: 65.0%
 Test Distance: 7.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

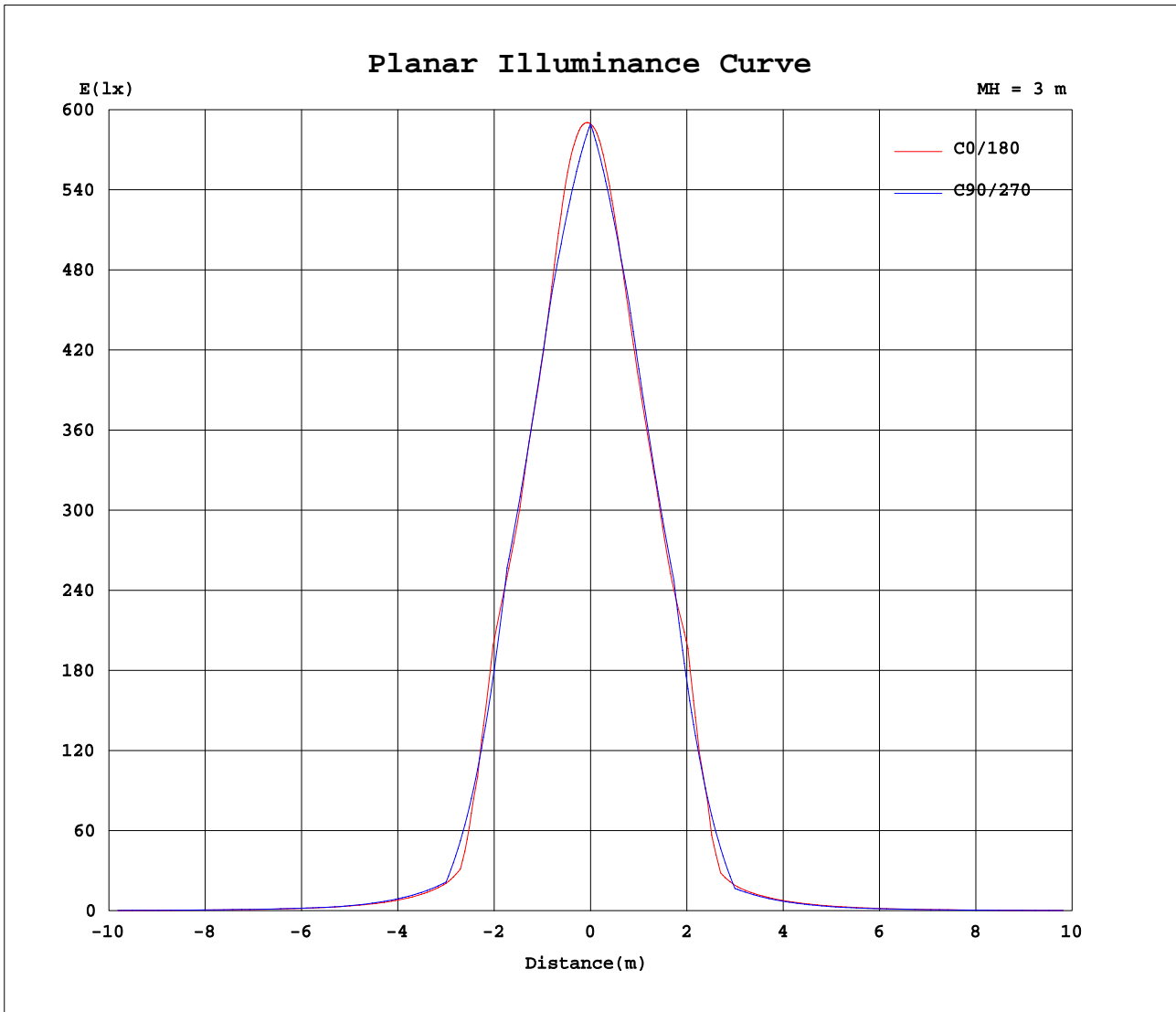
Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.288
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306
5	5301	5279	5258	5238	5219	5202	5186	5171	5156	5142	5130	5119	5109	5101	5094	5087	5082	5078	5076
10	5105	5066	5032	5003	4977	4957	4937	4921	4906	4892	4880	4871	4863	4856	4851	4847	4845	4845	4846
15	4670	4631	4603	4584	4575	4571	4574	4576	4579	4581	4581	4581	4581	4583	4585	4589	4595	4605	4616
20	4243	4203	4174	4154	4145	4148	4160	4183	4217	4252	4266	4257	4253	4256	4258	4257	4254	4259	4265
25	3857	3839	3836	3845	3850	3849	3846	3855	3835	3831	3846	3876	3881	3891	3920	3928	3917	3915	3913
30	3471	3439	3428	3440	3472	3526	3517	3436	3402	3441	3455	3466	3514	3524	3554	3600	3588	3573	3561
35	2853	2734	2719	2797	2963	2906	2659	2577	2683	2819	2999	3115	2971	2875	2751	2704	2639	2580	2556
40	1255	1151	1154	1229	1398	1509	1540	1432	1401	1700	2066	2149	2050	1901	1782	1692	1630	1573	1552
45	526	515	516	524	533	561	659	547	588	820	1074	1207	1137	962	820	700	618	567	548
50	397	389	390	394	392	394	396	400	409	431	495	463	400	408	417	427	436	442	443
55	303	298	302	300	301	303	304	305	306	303	308	313	317	322	326	331	335	338	338
60	228	225	227	226	230	229	229	229	232	235	238	239	240	240	239	238	236	234	232
65	168	166	167	169	169	169	170	172	174	174	173	172	175	178	180	182	183	183	183
70	120	120	120	120	121	121	123	123	123	125	127	129	130	132	133	134	134	134	134
75	79.1	78.4	79.2	79.5	80.3	81.1	82.1	83.5	84.5	85.3	85.9	86.3	86.5	86.4	86.1	85.7	85.3	85.0	84.8
80	43.6	43.3	43.9	44.8	45.7	46.7	47.6	48.0	47.9	42.1	34.7	27.6	20.9	14.9	9.77	5.59	2.51	0.63	0.00
85	12.2	12.1	13.7	14.6	14.3	8.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
Temperature:25.3DEG	Humidity:65.0%
Operators:DAMIN	Test Distance:7.000m [K=1.0000]
Test Date:2014-08-29	Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306
5	5073	5072	5071	5071	5071	5070	5071	5072	5073	5076	5080	5085	5092	5101	5112	5125	5140	5157	5136
10	4847	4845	4839	4829	4818	4806	4791	4778	4768	4761	4757	4756	4760	4766	4776	4792	4813	4839	4804
15	4623	4619	4603	4581	4552	4522	4497	4475	4457	4441	4426	4414	4405	4401	4404	4413	4430	4454	4415
20	4265	4248	4224	4196	4178	4175	4185	4198	4191	4165	4143	4124	4105	4090	4077	4071	4074	4087	4048
25	3899	3863	3818	3792	3788	3798	3811	3826	3853	3892	3923	3859	3794	3750	3727	3719	3728	3755	3727
30	3529	3471	3421	3415	3430	3450	3456	3472	3464	3347	3322	3385	3438	3403	3369	3340	3327	3330	3323
35	2544	2532	2566	2663	2804	2951	3106	2924	2690	2547	2496	2671	2923	2872	2715	2669	2682	2787	2582
40	1550	1562	1621	1731	1875	2034	2082	1931	1577	1414	1439	1481	1485	1374	1189	1127	1079	1133	1034
45	561	603	679	797	945	1120	1145	1003	840	564	520	627	558	511	500	484	481	487	473
50	438	427	415	404	393	386	445	490	417	392	384	381	379	378	380	375	371	375	366
55	335	329	323	316	312	308	304	301	297	299	298	297	297	294	294	296	290	293	286
60	232	232	233	233	234	234	234	233	232	230	227	227	226	226	224	225	221	222	217
65	182	181	179	177	174	172	169	170	172	172	171	169	168	167	167	165	164	164	161
70	133	133	132	131	130	128	127	125	123	122	122	122	121	120	119	118	118	117	116
75	84.8	84.9	85.2	85.5	85.8	85.9	85.9	85.5	84.9	84.2	83.2	81.9	81.2	80.4	79.6	78.2	77.5	76.6	75.5
80	0.63	2.50	5.56	9.73	14.9	20.9	27.7	35.0	42.8	48.7	48.8	48.3	47.3	46.0	44.9	44.0	42.5	41.8	40.9
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.50	15.1	15.3	14.0	12.5	11.3
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
Temperature:25.3DEG	Humidity:65.0%
Operators:DAMIN	Test Distance:7.000m [K=1.0000]
Test Date:2014-08-29	Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306
5	5118	5101	5087	5075	5065	5058	5051	5046	5043	5041	5039	5039	5039	5040	5042	5046	5051	5055	5061
10	4774	4751	4732	4719	4709	4704	4702	4705	4710	4720	4734	4746	4759	4770	4778	4786	4796	4802	4808
15	4384	4360	4342	4332	4327	4329	4335	4346	4362	4382	4405	4431	4463	4491	4513	4527	4541	4545	4544
20	4019	3999	3989	3988	3995	4007	4019	4030	4035	4045	4062	4077	4092	4114	4137	4153	4171	4180	4189
25	3712	3709	3708	3708	3706	3710	3644	3619	3649	3691	3722	3753	3751	3747	3762	3779	3800	3817	3834
30	3333	3362	3400	3434	3324	3123	3014	3057	3098	3175	3355	3426	3460	3418	3396	3406	3429	3458	3477
35	2491	2479	2558	2671	2500	2209	2047	2095	2303	2591	2645	2751	2687	2567	2462	2426	2428	2466	2513
40	979	911	1045	1188	1268	1158	925	966	1293	1588	1719	1741	1690	1590	1483	1434	1427	1458	1509
45	468	465	464	468	516	454	454	477	660	821	908	821	723	599	501	444	426	448	508
50	364	363	358	355	352	351	350	353	362	364	335	338	340	342	345	346	348	348	349
55	287	282	279	278	275	273	271	267	267	267	267	268	268	268	269	269	270	270	271
60	218	214	214	212	210	207	207	207	206	204	202	200	198	195	193	192	191	192	193
65	160	159	158	157	155	155	154	152	149	146	146	147	148	148	148	149	148	148	148
70	114	113	113	111	110	109	107	107	107	107	107	106	106	106	106	106	106	106	106
75	74.7	74.2	73.1	72.0	71.2	71.1	70.9	70.3	69.5	68.5	67.5	66.5	65.5	64.6	63.8	63.3	63.1	63.2	63.6
80	40.9	39.9	39.2	38.8	38.5	37.8	36.6	32.0	26.4	20.9	15.8	11.2	7.31	4.17	1.87	0.47	0.00	0.47	1.86
85	11.0	10.8	9.65	5.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.3636A P:80.00W PF:0.9000 Lamp Flux:6141.48x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:320mm	PROTECTION ANGLE:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306				
5	5068	5076	5085	5094	5105	5118	5131	5147	5163	5179	5196	5215	5235	5256	5278				
10	4813	4821	4830	4840	4849	4859	4870	4881	4896	4912	4933	4956	4985	5020	5060				
15	4546	4548	4546	4535	4521	4505	4496	4495	4499	4508	4521	4538	4560	4588	4624				
20	4195	4190	4179	4154	4134	4135	4149	4162	4174	4176	4170	4163	4165	4178	4205				
25	3828	3828	3804	3758	3737	3739	3752	3799	3860	3827	3818	3817	3817	3817	3829				
30	3475	3486	3408	3336	3204	3116	3099	3113	3225	3413	3535	3520	3494	3467	3460				
35	2601	2671	2701	2613	2475	2368	2256	2167	2331	2608	2753	2674	2606	2602	2675				
40	1603	1671	1724	1662	1632	1435	1096	1032	1218	1369	1308	1151	1044	1062	1132				
45	606	723	818	897	897	732	516	491	486	573	515	506	506	506	511				
50	348	346	344	342	377	385	370	367	368	369	373	377	383	383	385				
55	271	271	272	272	271	271	270	277	281	284	287	288	292	296	295				
60	195	198	201	204	207	209	209	210	209	214	216	219	219	223	223				
65	148	147	147	147	147	150	154	156	157	157	159	161	163	163	165				
70	106	106	106	107	107	108	108	108	110	112	113	114	116	117	119				
75	64.3	65.2	66.3	67.4	68.6	69.7	70.7	71.5	71.9	72.2	73.2	74.3	75.5	76.7	77.5				
80	4.15	7.28	11.2	15.7	20.8	26.2	31.9	36.6	37.9	38.7	39.2	39.8	40.6	41.6	42.5				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.63	9.12	10.4	11.0	11.3				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2014-08-29
 γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.288
 Humidity:65.0%
 Test Distance:7.000m [K=1.0000]
 Remarks: