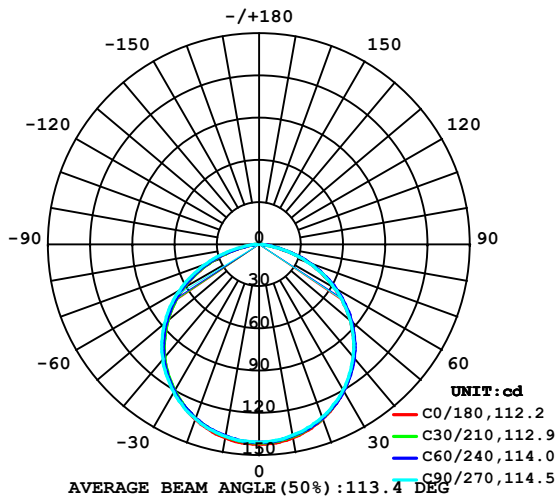


## LUMINAIRE PHOTOMETRIC TEST REPORT

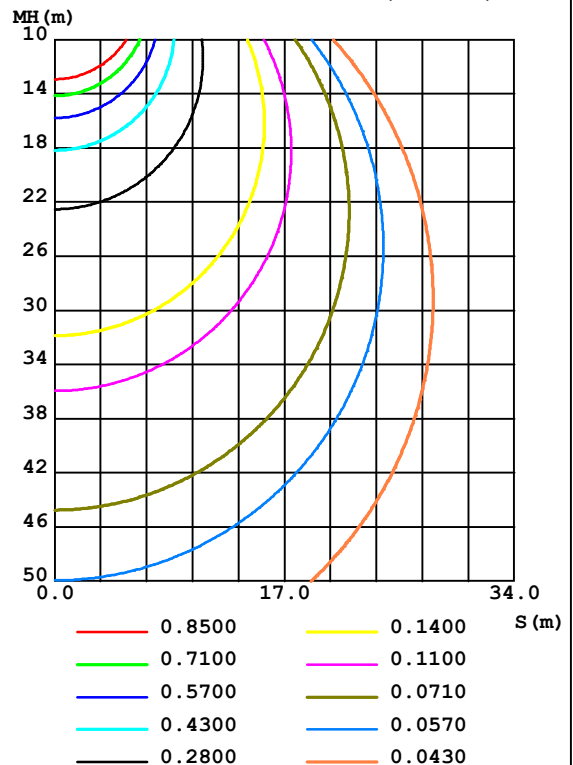
Test:U:12.02V I:0.5157A P:6.197W PF:1.0000 Lamp Flux:398.868x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:
SPEC.:2835 60LED	DIM.: 1000*8*1MM	SERIAL No.:2015110601
MFR.:	SUR.:1000*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 64.37 lm/W			
WW-FLS1002T28XX060B-12 (WCP) -10-HR		Imax(cd)	142.2	S/MH(C0/180)	1.26
NOMINAL POWER(W)	6	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	DC 12	TOTAL FLUX(lm)	398.87	$\eta$ UP,DN(C0-180)	0.0,49.3
NOMINAL FLUX(lm)	398.868	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,50.7
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	12	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:4.950m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

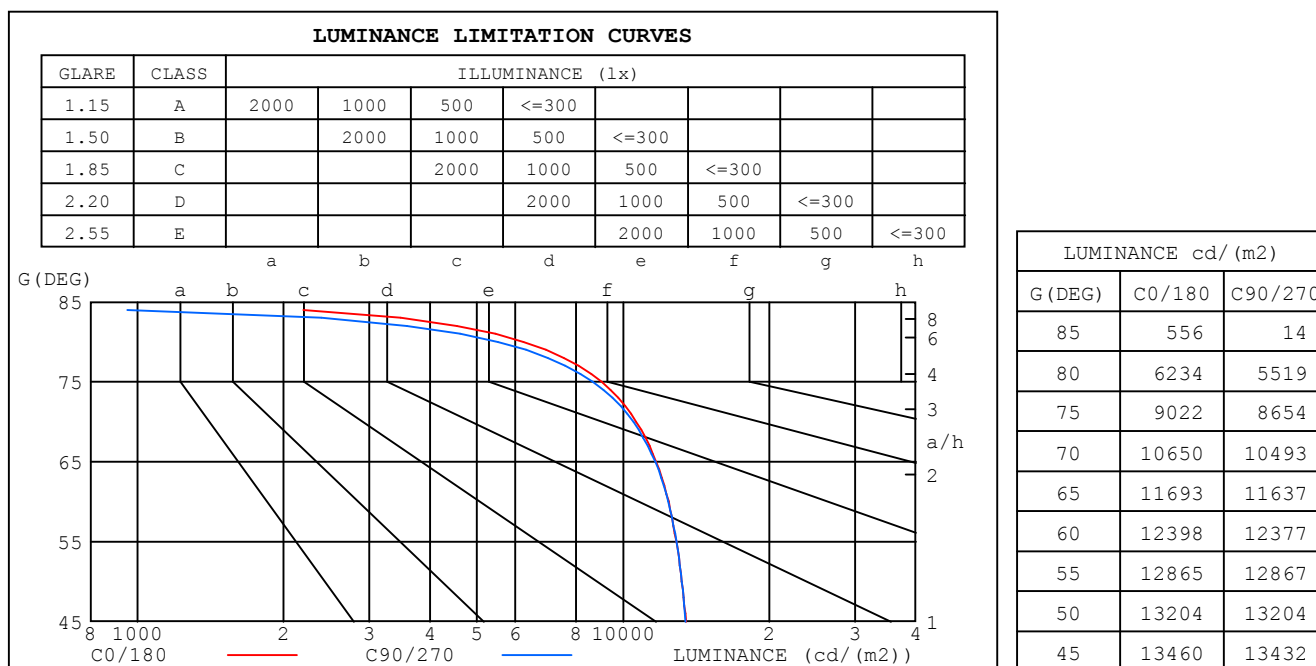
## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	139.6	138.9	138.0	139.0	139.8	138.7	138.6	140.0	0- 10	13.37	13.37	3.35,3.35
20	132.3	132.0	131.0	131.5	132.6	131.6	132.3	133.6	10- 20	38.39	51.76	13,13
30	120.5	120.7	119.6	119.5	120.8	120.1	121.6	122.5	20- 30	58.45	110.2	27.6,27.6
40	104.5	105.3	104.2	103.3	104.8	104.5	106.8	107.3	30- 40	70.89	181.1	45.4,45.4
50	84.88	86.08	84.88	83.22	84.89	84.95	88.03	88.35	40- 50	73.87	255.0	63.9,63.9
60	61.99	63.27	61.88	59.61	61.59	61.82	65.58	65.75	50- 60	66.59	321.6	80.6,80.6
70	36.42	37.61	35.89	33.07	35.60	35.87	39.94	40.28	60- 70	49.42	371.0	93,93
80	10.83	11.52	9.584	7.373	9.715	9.727	13.34	14.24	70- 80	24.89	395.9	99.2,99.2
90	0	0	0	0	0	0	0	0	80- 90	2.995	398.9	100,100
100	0	0	0	0	0	0	0	0	90-100	0	398.9	100,100
110	0	0	0	0	0	0	0	0	100-110	0	398.9	100,100
120	0	0	0	0	0	0	0	0	110-120	0	398.9	100,100
130	0	0	0	0	0	0	0	0	120-130	0	398.9	100,100
140	0	0	0	0	0	0	0	0	130-140	0	398.9	100,100
150	0	0	0	0	0	0	0	0	140-150	0	398.9	100,100
160	0	0	0	0	0	0	0	0	150-160	0	398.9	100,100
170	0	0	0	0	0	0	0	0	160-170	0	398.9	100,100
180	0	0	0	0	0	0	0	0	170-180	0	398.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:4.950m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

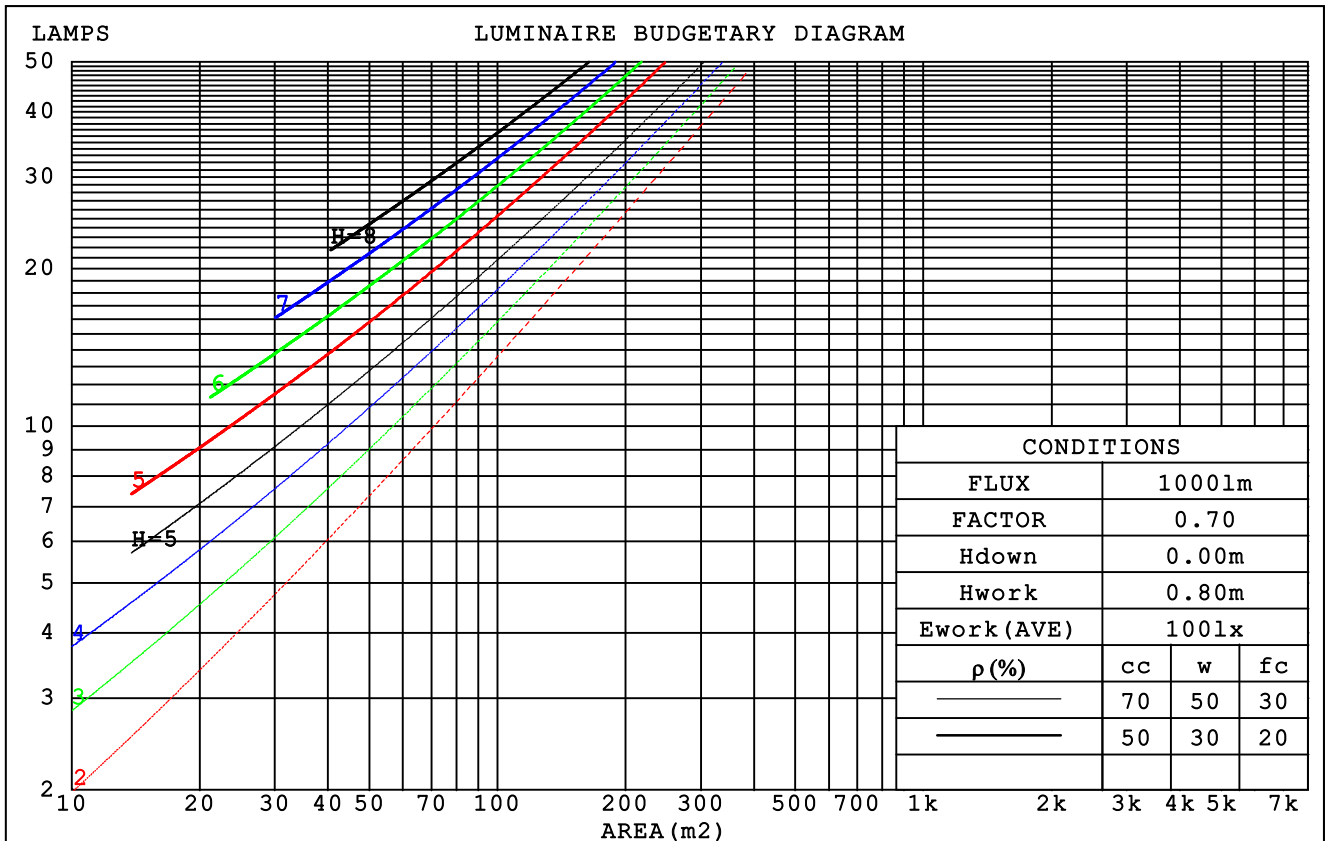


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity: 65.0%  
Test Distance: 4.950m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.05	1.01	.97	1.02	.99	.95	.98	.95	.92	.94	.92	.89	.91	.89	.87	.85
2.0	.91	.85	.79	.89	.83	.78	.86	.81	.76	.83	.78	.75	.80	.76	.73	.71
3.0	.80	.72	.66	.79	.71	.65	.76	.69	.64	.73	.67	.63	.70	.66	.62	.60
4.0	.71	.62	.56	.70	.62	.55	.67	.60	.54	.65	.59	.54	.63	.57	.53	.51
5.0	.63	.54	.48	.62	.54	.48	.60	.53	.47	.58	.52	.47	.56	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.54	.47	.41	.53	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.36	.48	.41	.36	.47	.40	.36	.34
8.0	.47	.39	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.29	.43	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.37	.31	.26	.25



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 4.950m [K=1.0000]  
 Remarks:

### WEC AND CCEC

$\rho_{cc}$	80%			70%			50%			30%			10%			0	
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
$\rho_{fc}$	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.295	.168	.053	.288	.164	.052	.275	.158	.050	.262	.151	.049	.251	.146	.047		
2.0	.283	.155	.048	.277	.153	.047	.265	.148	.046	.255	.143	.045	.245	.138	.044		
3.0	.265	.141	.042	.259	.139	.042	.249	.135	.041	.239	.131	.040	.231	.128	.039		
4.0	.246	.128	.038	.241	.126	.037	.232	.123	.037	.223	.120	.036	.215	.117	.036		
5.0	.228	.116	.034	.224	.115	.033	.215	.112	.033	.208	.110	.033	.201	.107	.032		
6.0	.212	.106	.030	.208	.105	.030	.201	.103	.030	.194	.101	.030	.188	.099	.029		
7.0	.197	.098	.028	.194	.097	.028	.188	.095	.027	.182	.093	.027	.176	.091	.027		
8.0	.185	.090	.025	.182	.089	.025	.176	.088	.025	.170	.086	.025	.165	.085	.025		
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023		
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.147	.074	.021		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.147	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.090	.048	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.064	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:4.950m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

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	21.8	23.3	22.1	23.5	23.7	21.9	23.4	22.2	23.6	23.8
3H	23.2	24.6	23.5	24.9	25.1	23.3	24.7	23.6	24.9	25.1
4H	23.7	25.0	24.0	25.3	25.5	23.7	25.1	24.0	25.3	25.6
6H	23.9	25.2	24.3	25.4	25.7	23.9	25.2	24.3	25.4	25.7
8H	23.9	25.1	24.3	25.4	25.7	23.9	25.1	24.3	25.4	25.7
12H	23.9	25.1	24.3	25.4	25.7	23.9	25.0	24.2	25.3	25.6
4H 2H	22.4	23.8	22.8	24.0	24.3	22.5	23.8	22.8	24.1	24.3
3H	24.0	25.2	24.4	25.4	25.8	24.1	25.2	24.4	25.5	25.8
4H	24.6	25.6	25.0	26.0	26.3	24.6	25.7	25.0	26.0	26.3
6H	24.9	25.8	25.3	26.2	26.5	24.9	25.8	25.3	26.2	26.5
8H	24.9	25.8	25.3	26.2	26.5	24.9	25.8	25.3	26.1	26.5
12H	24.9	25.7	25.3	26.1	26.5	24.9	25.7	25.3	26.0	26.5
8H 4H	24.8	25.6	25.2	26.0	26.4	24.8	25.7	25.2	26.0	26.4
6H	25.2	25.9	25.6	26.3	26.7	25.2	25.9	25.6	26.3	26.7
8H	25.3	25.9	25.7	26.3	26.8	25.2	25.9	25.7	26.3	26.7
12H	25.2	25.8	25.7	26.2	26.7	25.2	25.7	25.7	26.2	26.7
12H 4H	24.8	25.6	25.2	25.9	26.4	24.8	25.6	25.2	26.0	26.4
6H	25.2	25.8	25.7	26.2	26.7	25.2	25.8	25.6	26.2	26.7
8H	25.3	25.8	25.7	26.3	26.7	25.2	25.8	25.7	26.2	26.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 398.9 lm Total Lamp Luminous Flux.(8log(F/F0) = -3.2)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2015-11-06

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:4.950m [K=1.0000]  
Remarks:

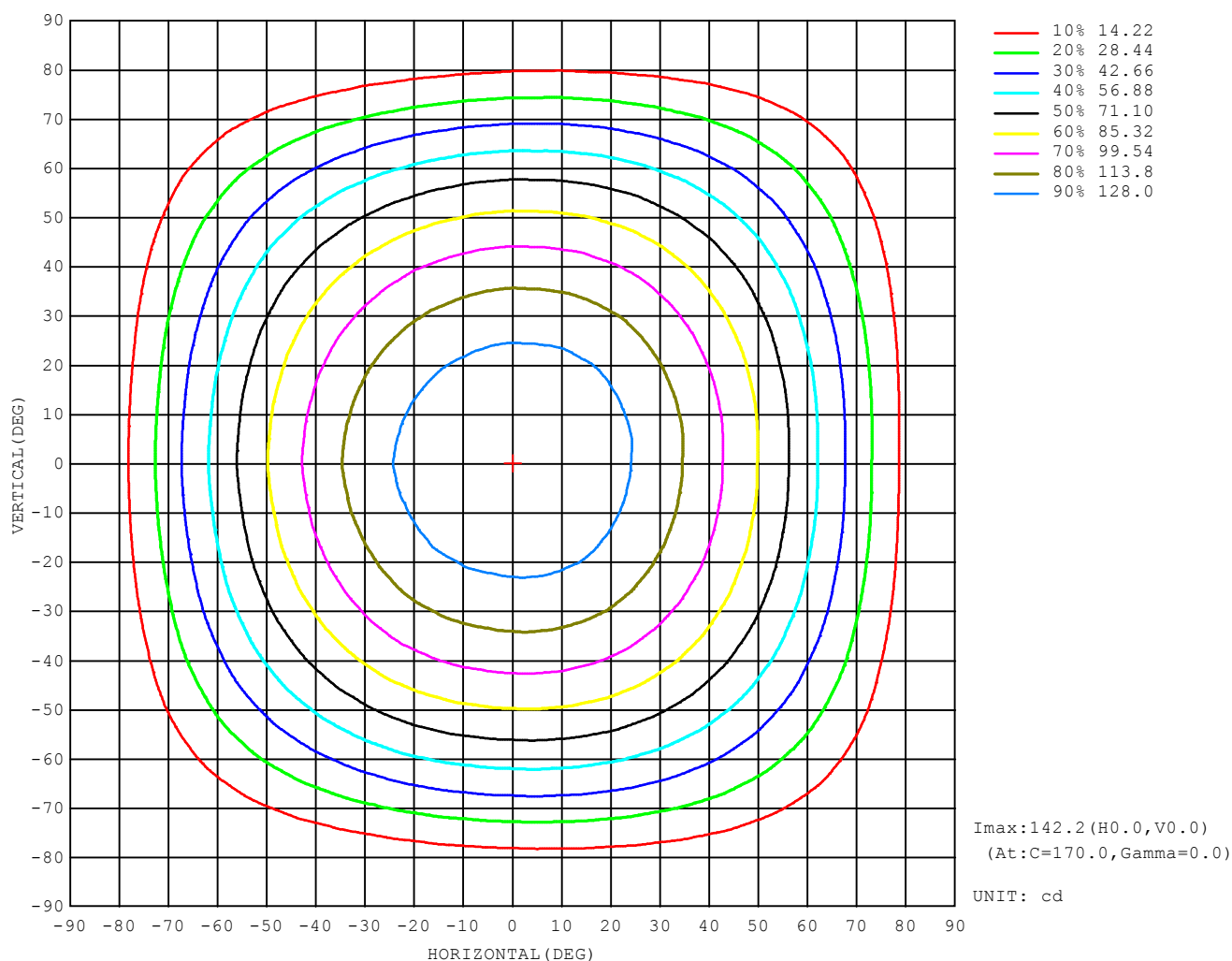
## UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	46	39	33
0.80	68	57	49	67	56	49	65	55	49	42
1.00	77	66	58	75	65	58	73	66	58	51
1.25	84	73	66	82	73	66	80	71	65	58
1.50	89	79	72	87	78	72	84	76	71	63
2.00	96	87	81	94	86	80	90	84	79	71
2.50	100	92	86	98	91	85	94	88	83	75
3.00	103	96	91	101	95	90	97	92	88	79
4.00	107	101	97	105	100	96	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	87
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: 2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 4.950m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

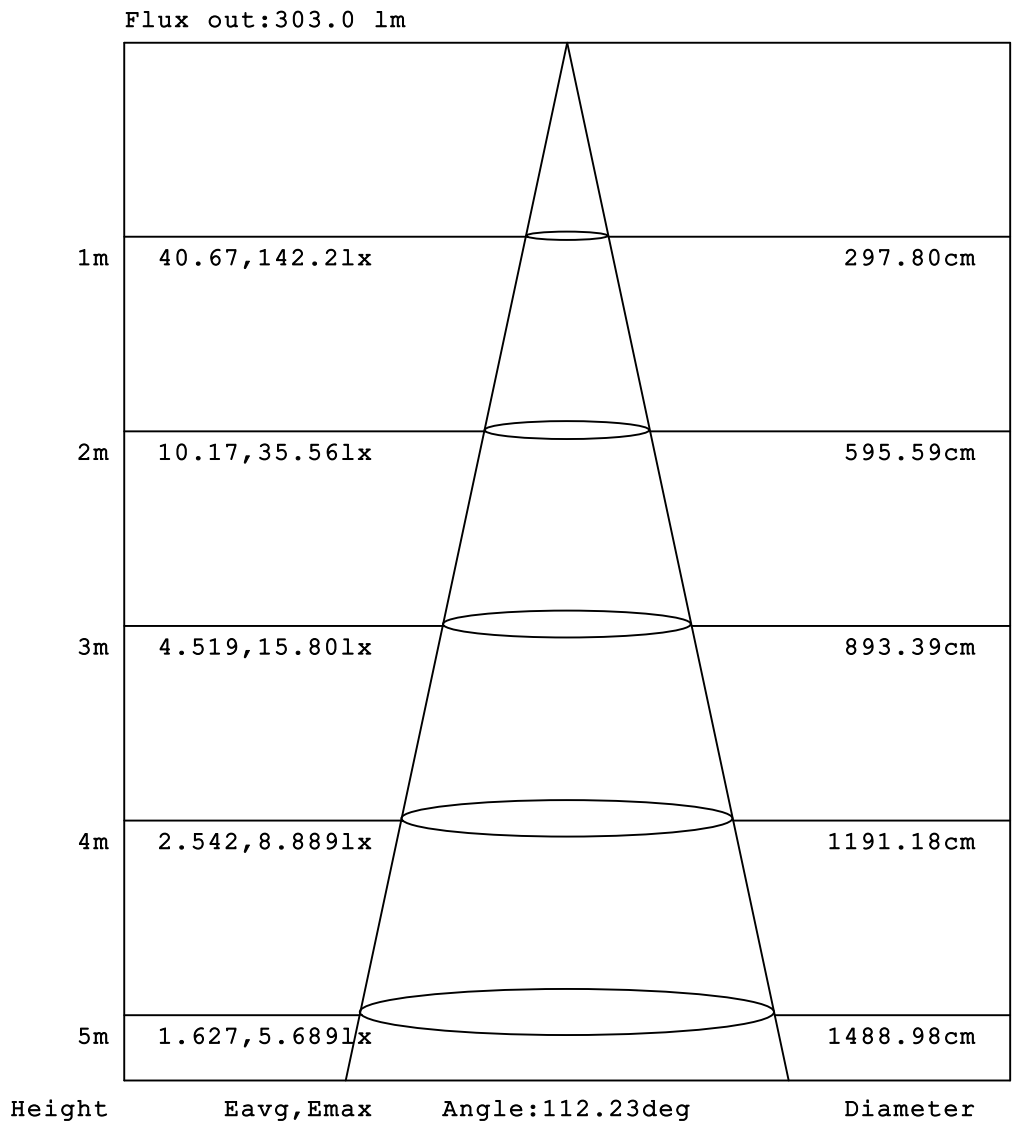


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:4.950m [K=1.0000]  
Remarks:



## AAI Figure

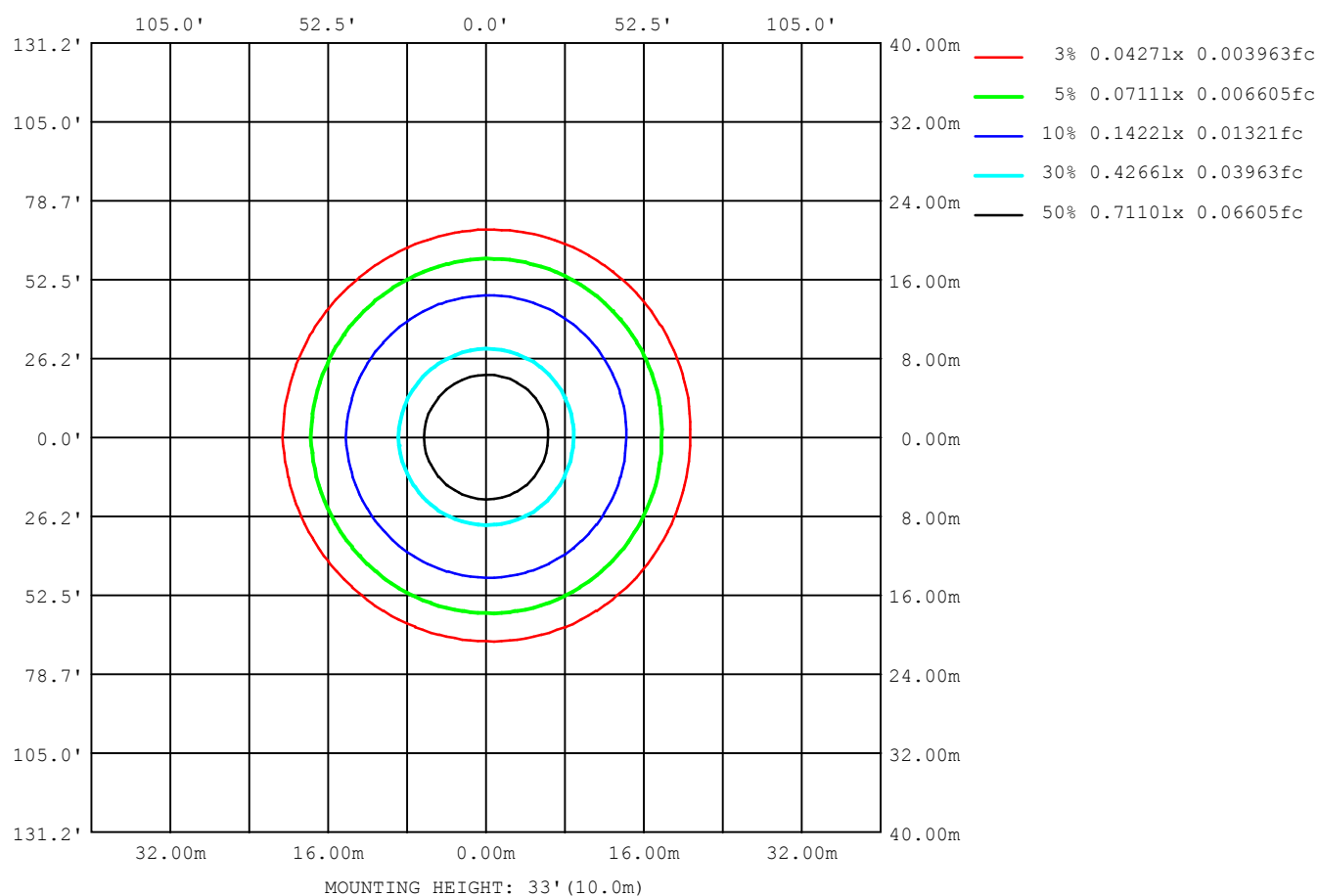


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity: 65.0%  
Test Distance: 4.950m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity: 65.0%  
Test Distance: 4.950m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:12.02V I:0.5157A P:6.197W PF:1.0000 Lamp Flux:398.868x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:
SPEC.:2835 60LED	DIM.: 1000*8*1MM	SERIAL No.:2015110601
MFR.:	SUR.:1000*8mm	Shielding Angle:

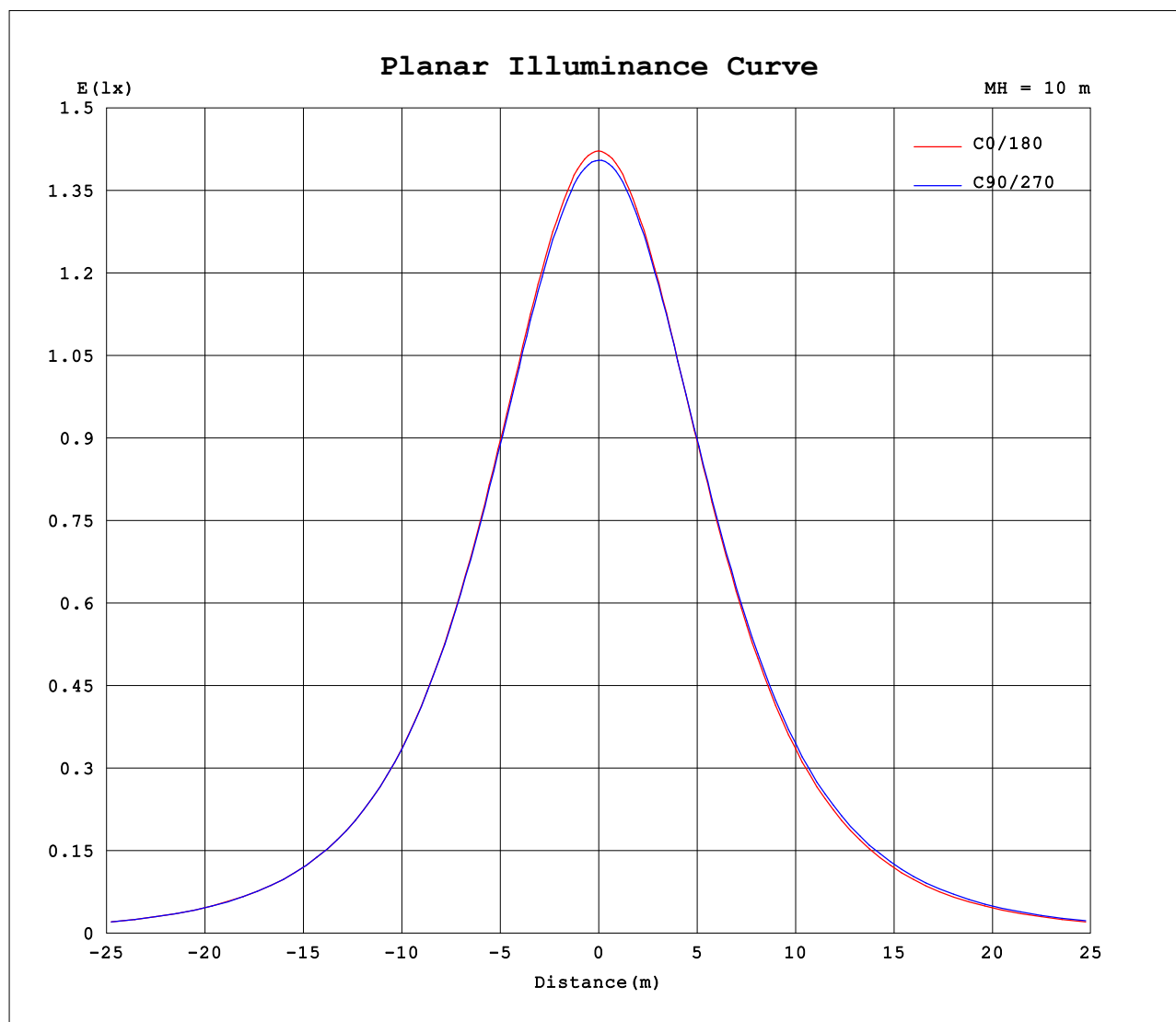
AvgL	cd/m2
L_0~180 (65) av	11622
L_0~180 (75) av	8813
L_0~180 (85) av	278
L_90~270 (65) av	12098
L_90~270 (75) av	9447
L_90~270 (85) av	1136
L_45 (65) av	11819
L_45 (75) av	9034
L_45 (85) av	1129

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:4.950m [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: 2015-11-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity: 65.0%  
Test Distance: 4.950m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

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	142	142	142	142	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141
5	142	141	141	141	141	141	141	141	141	141	141	140	140	140	140	140	140	140	140
10	140	139	139	139	139	139	139	139	139	139	139	139	138	138	138	138	138	138	138
15	137	136	136	136	136	136	136	136	136	136	136	136	136	136	136	135	135	135	135
20	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	131	131	131	131
25	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	126	126	126	126
30	120	120	120	120	120	120	120	121	120	121	121	121	121	121	120	120	120	120	120
35	113	113	113	113	113	113	113	113	113	114	114	114	114	113	113	113	113	113	112
40	105	105	104	105	104	105	105	105	105	105	105	106	105	105	105	105	105	105	104
45	95.2	95.3	95.1	95.3	95.2	95.6	95.5	95.8	95.8	96.2	96.1	96.5	96.3	96.4	95.9	96.0	95.6	95.5	95.0
50	84.9	85.1	84.9	85.1	85.0	85.4	85.3	85.7	85.7	86.1	86.0	86.4	86.2	86.4	85.9	86.0	85.5	85.4	84.9
55	73.8	74.0	73.8	74.0	74.0	74.3	74.3	74.7	74.7	75.1	75.0	75.3	75.2	75.4	75.0	74.9	74.5	74.4	73.8
60	62.0	62.2	62.1	62.3	62.2	62.6	62.5	63.0	62.9	63.3	63.2	63.5	63.3	63.5	63.2	63.1	62.7	62.5	61.9
65	49.4	49.7	49.5	49.9	49.7	50.1	50.0	50.4	50.4	50.7	50.6	50.9	50.7	50.9	50.5	50.5	49.9	49.8	49.2
70	36.4	36.7	36.6	36.8	36.7	37.0	37.0	37.3	37.3	37.6	37.5	37.7	37.4	37.6	37.2	37.2	36.7	36.5	35.9
75	23.4	23.6	23.5	23.8	23.6	23.9	23.8	24.1	24.0	24.3	24.1	24.4	24.0	24.1	23.7	23.7	23.1	23.1	22.4
80	10.8	11.1	10.9	11.3	11.0	11.3	11.1	11.4	11.3	11.5	11.3	11.5	11.1	11.2	10.7	10.7	10.2	10.2	9.58
85	0.48	0.68	0.54	0.73	0.58	0.77	0.61	0.81	0.64	0.81	0.58	0.68	0.34	0.40	0.03	0.02	0.02	0.00	0.01
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
95	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
100	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
105	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
110	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
115	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
120	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
125	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
130	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
135	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
140	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
145	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
150	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
155	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
160	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
165	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
170	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
175	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
180	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: 2015-11-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 4.950m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

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	140	140	141	141	141	141	141	141	142	142	142	142	142	142	142	142	142	142	142
5	140	140	140	140	140	140	140	141	141	141	141	141	141	141	141	141	142	142	141
10	138	138	138	138	138	138	138	139	139	139	139	139	139	139	139	139	140	140	139
15	135	135	135	135	135	135	135	135	136	136	136	136	136	136	136	136	136	137	136
20	131	131	131	131	131	131	131	131	132	131	131	131	131	131	132	132	132	133	132
25	126	125	126	126	126	126	126	126	126	126	126	126	126	126	126	127	127	127	127
30	120	119	119	119	119	119	119	119	119	119	119	119	119	119	120	120	120	121	120
35	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	113	113	113
40	104	104	104	104	104	103	104	103	103	103	103	103	103	103	103	104	104	105	104
45	94.9	94.4	94.6	94.3	94.2	93.9	94.2	93.7	93.7	93.4	93.6	93.4	93.7	93.7	94.2	94.2	94.7	95.2	94.9
50	84.8	84.3	84.4	84.0	83.9	83.7	83.8	83.2	83.2	82.8	83.0	82.8	83.2	83.1	83.6	83.6	84.2	84.9	84.6
55	73.7	73.1	73.2	72.7	72.7	72.4	72.3	71.7	71.8	71.4	71.5	71.4	71.7	71.7	72.1	72.2	72.7	73.6	73.3
60	61.7	61.2	61.3	60.6	60.7	60.1	60.1	59.5	59.6	59.2	59.4	59.2	59.7	59.6	60.1	60.1	60.8	61.6	61.2
65	49.0	48.4	48.4	47.9	47.8	47.1	47.1	46.5	46.6	46.2	46.5	46.3	46.7	46.7	47.2	47.2	47.9	48.8	48.6
70	35.7	35.1	35.0	34.5	34.2	33.6	33.5	33.0	33.1	32.8	33.0	32.9	33.3	33.3	33.8	34.0	34.6	35.6	35.3
75	22.3	21.7	21.6	20.8	20.7	20.1	20.0	19.6	19.7	19.5	19.7	19.6	20.1	20.1	20.6	20.8	21.5	22.3	22.0
80	9.52	8.97	8.82	8.15	8.01	7.47	7.53	7.18	7.37	7.14	7.48	7.34	7.84	7.82	8.41	8.48	9.17	9.72	9.51
85	0.00	0.01	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	0.01	0.00	0.00	0.01
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
95	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
100	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
105	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
110	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
115	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
120	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
125	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
130	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
135	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
140	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
145	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
150	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
155	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
160	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
165	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
170	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
175	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
180	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:2015-11-06

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351

Humidity:65.0%

Test Distance:4.950m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

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	142	142	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	140	140
5	141	141	141	141	141	141	140	140	140	140	140	140	140	140	140	140	140	140	140
10	139	139	139	139	139	139	139	139	139	139	138	138	138	138	139	139	139	139	139
15	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136
20	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
25	127	127	127	126	127	126	126	126	127	127	127	127	127	127	127	127	127	127	128
30	120	120	120	120	120	120	120	120	120	120	121	120	121	121	121	121	122	122	122
35	113	113	113	113	113	113	113	113	113	113	113	113	114	114	114	114	115	115	115
40	105	104	104	104	105	104	105	104	105	105	105	105	106	106	106	106	107	107	107
45	95.0	94.7	95.0	94.8	95.1	94.9	95.2	95.2	95.5	95.6	96.1	96.1	96.6	96.8	97.3	97.4	97.9	97.8	98.3
50	84.7	84.5	84.7	84.6	84.8	84.7	85.0	85.0	85.4	85.4	86.0	86.1	86.6	86.7	87.4	87.6	88.0	88.0	88.5
55	73.5	73.2	73.5	73.3	73.7	73.5	73.9	73.8	74.3	74.3	75.0	75.0	75.7	75.8	76.5	76.7	77.3	77.2	77.8
60	61.5	61.2	61.5	61.3	61.7	61.5	61.9	61.8	62.3	62.4	63.0	63.1	63.9	64.1	64.8	65.0	65.6	65.6	66.2
65	48.7	48.5	48.8	48.7	49.0	48.9	49.2	49.2	49.6	49.7	50.3	50.4	51.2	51.5	52.2	52.5	53.1	53.2	53.8
70	35.5	35.3	35.6	35.4	35.7	35.6	35.9	35.9	36.3	36.3	37.0	37.2	37.9	38.2	39.0	39.3	39.9	40.1	40.7
75	22.2	22.0	22.3	22.1	22.4	22.2	22.5	22.4	22.9	22.9	23.5	23.6	24.4	24.7	25.5	25.8	26.5	26.6	27.3
80	9.67	9.50	9.70	9.57	9.78	9.62	9.84	9.73	10.1	10.1	10.6	10.7	11.4	11.6	12.4	12.7	13.3	13.5	14.1
85	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.04	0.03	0.53	0.70	1.27	1.46	1.97	2.11	2.56
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
95	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
100	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
105	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
110	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
115	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
120	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
125	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
130	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
135	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
140	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
145	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
150	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
155	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
160	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
165	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
170	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
175	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
180	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:2015-11-06

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351

Humidity:65.0%

Test Distance:4.950m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	141	141	141	141	141	141	142	142	142	142	142	142	142	142	142				
5	140	140	141	141	141	141	142	141	141	141	141	141	142	142	142				
10	139	139	139	139	139	140	140	140	140	140	140	140	140	140	140				
15	136	137	137	137	137	137	137	137	137	137	137	137	137	137	137				
20	132	133	133	133	133	133	134	133	133	133	133	133	133	133	133				
25	128	128	128	128	128	129	129	128	128	128	128	128	128	128	127				
30	122	122	122	122	122	123	123	122	122	122	122	122	121	121	121				
35	115	116	115	116	116	116	115	115	115	115	114	114	114	114	113				
40	107	108	108	108	108	108	107	107	107	107	106	106	106	106	105				
45	98.4	98.9	98.6	98.9	98.8	98.8	98.2	98.2	97.7	97.6	97.0	97.0	96.4	96.3	95.6				
50	88.6	89.0	88.8	89.1	88.9	88.8	88.3	88.3	87.8	87.6	87.1	87.0	86.4	86.2	85.5				
55	77.9	78.3	78.1	78.5	77.9	78.0	77.4	77.4	76.7	76.7	76.1	76.0	75.3	75.2	74.4				
60	66.3	66.7	66.5	66.7	66.2	66.3	65.8	65.7	65.1	65.0	64.4	64.3	63.6	63.4	62.6				
65	53.8	54.2	54.1	54.2	53.8	53.8	53.3	53.3	52.8	52.7	52.1	51.9	51.3	51.0	50.3				
70	40.7	41.1	40.8	41.0	40.7	40.7	40.3	40.3	39.8	39.8	39.1	39.0	38.3	38.2	37.4				
75	27.2	27.5	27.3	27.6	27.2	27.4	27.0	27.1	26.7	26.7	26.1	26.0	25.4	25.3	24.6				
80	13.9	14.3	14.1	14.5	14.3	14.5	14.2	14.4	14.0	14.0	13.6	13.5	13.0	12.9	12.3				
85	2.52	2.87	2.83	3.15	3.03	3.30	3.11	3.31	3.02	3.13	2.75	2.78	2.31	2.27	1.74				
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				
95	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				
100	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				
105	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				
110	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				
115	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				
120	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				
125	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				
130	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				
135	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				
140	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				
145	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				
150	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				
155	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				
160	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				
165	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				
170	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				
175	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				
180	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: 2015-11-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
 Humidity: 65.0%  
 Test Distance: 4.950m [K=1.0000]  
 Remarks: