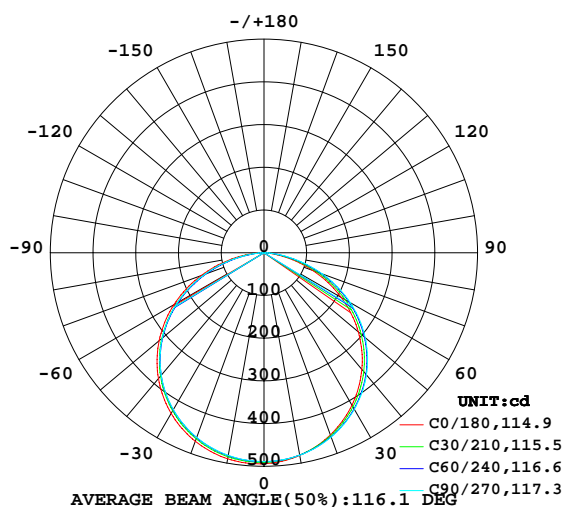


## LUMINAIRE PHOTOMETRIC TEST REPORT

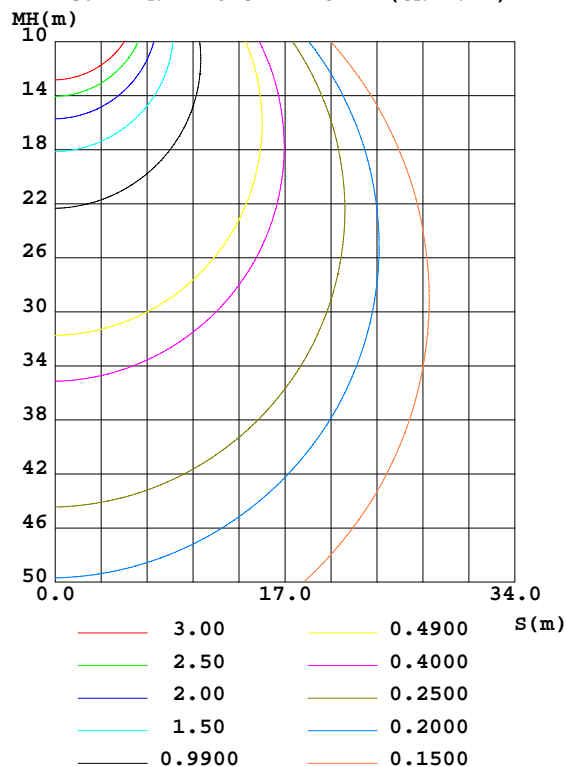
Test:U:24.01V I:0.7864A P:18.88W PF:1.000 Lamp Flux:1450.45x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:
SPEC.:2835 120LED WW	DIM.: 1000*8*1MM	SERIAL No.:2015072402
MFR.:	SUR.:1000*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.83 lm/W			
MODEL	29WW120B-24(WCP)-HR	Imax(cd)	494.4	S/MH(C0/180)	1.31
NOMINAL POWER(W)	18.7	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	DC 24	TOTAL FLUX(lm)	1450.4	$\eta$ UP,DN(C0-180)	0.0,49.6
NOMINAL FLUX(lm)	1450.45	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,50.4
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	$\eta$ 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:13 October 2015

$\gamma$  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

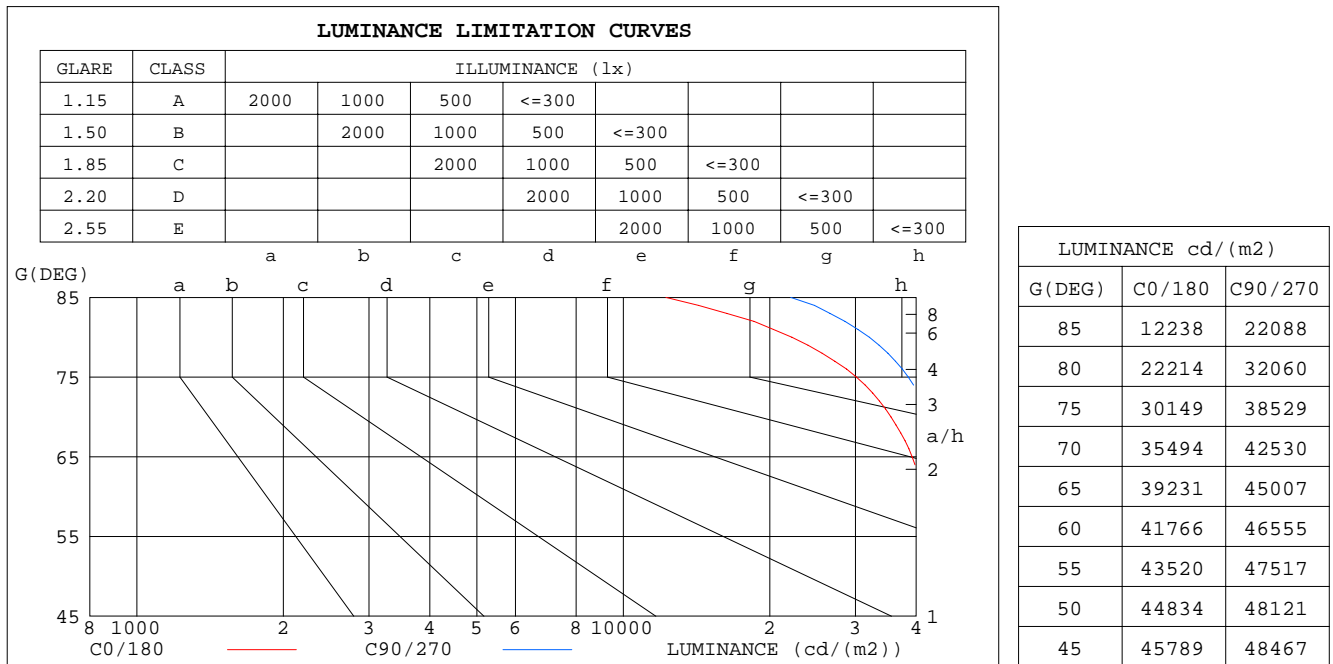
### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	481.6	481.9	481.2	486.2	489.8	483.7	481.7	485.2	0- 10	46.51	46.51	3.21,3.21
20	454.0	458.4	459.3	464.1	469.8	461.9	460.1	462.2	10- 20	133.8	180.3	12.4,12.4
30	412.1	420.4	423.1	426.7	434.5	425.0	424.2	424.1	20- 30	204.7	385.0	26.5,26.5
40	356.3	368.4	372.9	374.9	384.4	373.7	374.3	372.2	30- 40	250.0	635.0	43.8,43.8
50	288.2	303.5	309.3	309.5	320.5	308.6	310.8	307.4	40- 50	263.2	898.1	61.9,61.9
60	208.8	225.9	232.8	231.0	243.5	230.7	234.3	230.3	50- 60	241.1	1139	78.5,78.5
70	121.4	139.0	145.5	142.3	156.6	142.4	146.7	143.1	60- 70	184.7	1324	91.3,91.3
80	38.57	51.88	55.67	53.58	67.87	53.59	56.86	55.36	70- 80	102.6	1427	98.4,98.4
90	0.0030	0.3456	0.0047	0	4.820	0.2999	0	1.182	80- 90	23.86	1450	100,100
100	0	0	0	0	0	0	0	0	90-100	0.0441	1450	100,100
110	0	0	0	0	0	0	0	0	100-110	0	1450	100,100
120	0	0	0	0	0	0	0	0	110-120	0	1450	100,100
130	0	0	0	0	0	0	0	0	120-130	0	1450	100,100
140	0	0	0	0	0	0	0	0	130-140	0	1450	100,100
150	0	0	0	0	0	0	0	0	140-150	0	1450	100,100
160	0	0	0	0	0	0	0	0	150-160	0	1450	100,100
170	0	0	0	0	0	0	0	0	160-170	0	1450	100,100
180	0	0	0	0	0	0	0	0	170-180	0	1450	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:13 October 2015

$\gamma$  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

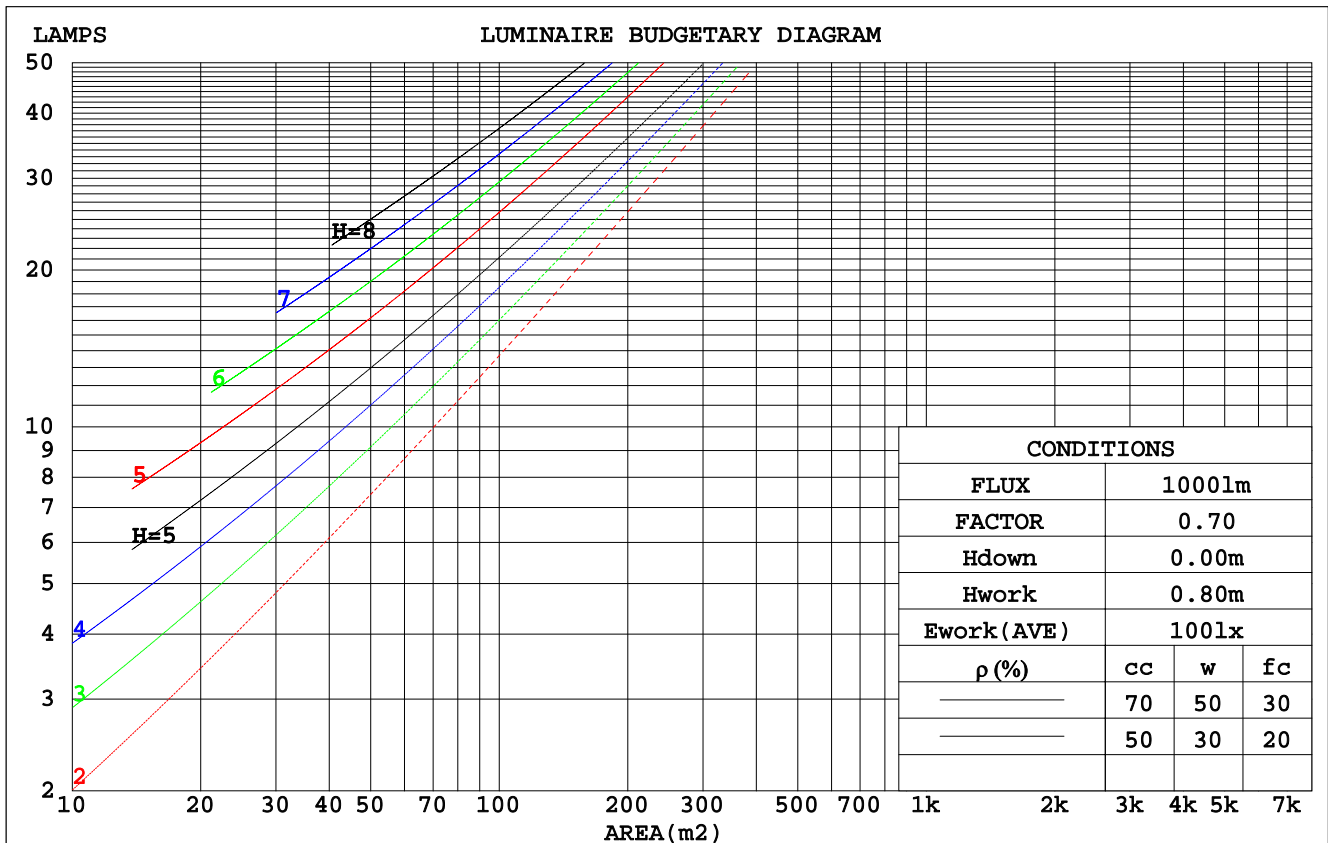


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 13 October 2015

$\gamma$  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	.00
1.0	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.84
2.0	.90	.83	.78	.88	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.69
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.57	.52	.62	.56	.52	.49
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.50	.45	.55	.49	.45	.43
6.0	.56	.47	.41	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.47	.40	.35	.46	.39	.35	.33
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.42	.34	.29	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.24



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 13 October 2015

$\gamma$  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

pcc	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	.310	.176	.056	.303	.173	.055	.289	.166	.053	.277	.160	.051	.266	.154	.050		
2.0	.293	.160	.049	.287	.158	.049	.275	.153	.047	.264	.148	.046	.254	.144	.045		
3.0	.271	.144	.043	.266	.142	.043	.255	.138	.042	.246	.135	.041	.237	.131	.041		
4.0	.251	.130	.038	.246	.129	.038	.236	.125	.037	.228	.122	.037	.220	.120	.036		
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.034	.212	.112	.033	.204	.109	.033		
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.191	.100	.030		
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.093	.027		
8.0	.187	.091	.026	.184	.090	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025		
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023		
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.021		

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	.180	.156	.134	.154	.134	.116	.106	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.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:13 October 2015

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:

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	25.9	27.5	26.2	27.7	27.9	26.4	27.9	26.6	28.1	28.3
3H	27.3	28.7	27.6	28.9	29.2	27.9	29.4	28.2	29.6	29.8
4H	27.8	29.1	28.1	29.4	29.6	28.5	29.9	28.8	30.1	30.4
6H	28.0	29.3	28.3	29.5	29.8	28.9	30.2	29.2	30.5	30.7
8H	28.0	29.3	28.4	29.5	29.8	29.0	30.2	29.4	30.5	30.8
12H	28.0	29.2	28.4	29.5	29.8	29.0	30.2	29.4	30.5	30.8
4H 2H	26.6	28.0	26.9	28.2	28.5	27.0	28.3	27.3	28.6	28.8
3H	28.2	29.3	28.5	29.6	29.9	28.7	29.9	29.0	30.2	30.5
4H	28.7	29.8	29.1	30.1	30.5	29.4	30.5	29.8	30.8	31.1
6H	29.1	30.0	29.5	30.4	30.7	29.9	30.9	30.3	31.2	31.6
8H	29.1	30.0	29.5	30.4	30.8	30.0	30.9	30.5	31.3	31.7
12H	29.1	30.0	29.6	30.3	30.7	30.1	30.9	30.5	31.3	31.7
8H 4H	29.0	29.9	29.4	30.3	30.7	29.6	30.5	30.0	30.9	31.3
6H	29.5	30.2	29.9	30.6	31.0	30.2	31.0	30.7	31.4	31.8
8H	29.6	30.2	30.1	30.7	31.1	30.4	31.1	30.9	31.5	32.0
12H	29.6	30.2	30.1	30.7	31.1	30.6	31.1	31.0	31.6	32.0
12H 4H	29.0	29.8	29.5	30.2	30.6	29.6	30.4	30.0	30.8	31.2
6H	29.5	30.2	30.0	30.6	31.1	30.3	30.9	30.7	31.3	31.8
8H	29.7	30.2	30.2	30.7	31.2	30.5	31.1	31.0	31.5	32.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1450 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.3)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:13 October 2015

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:

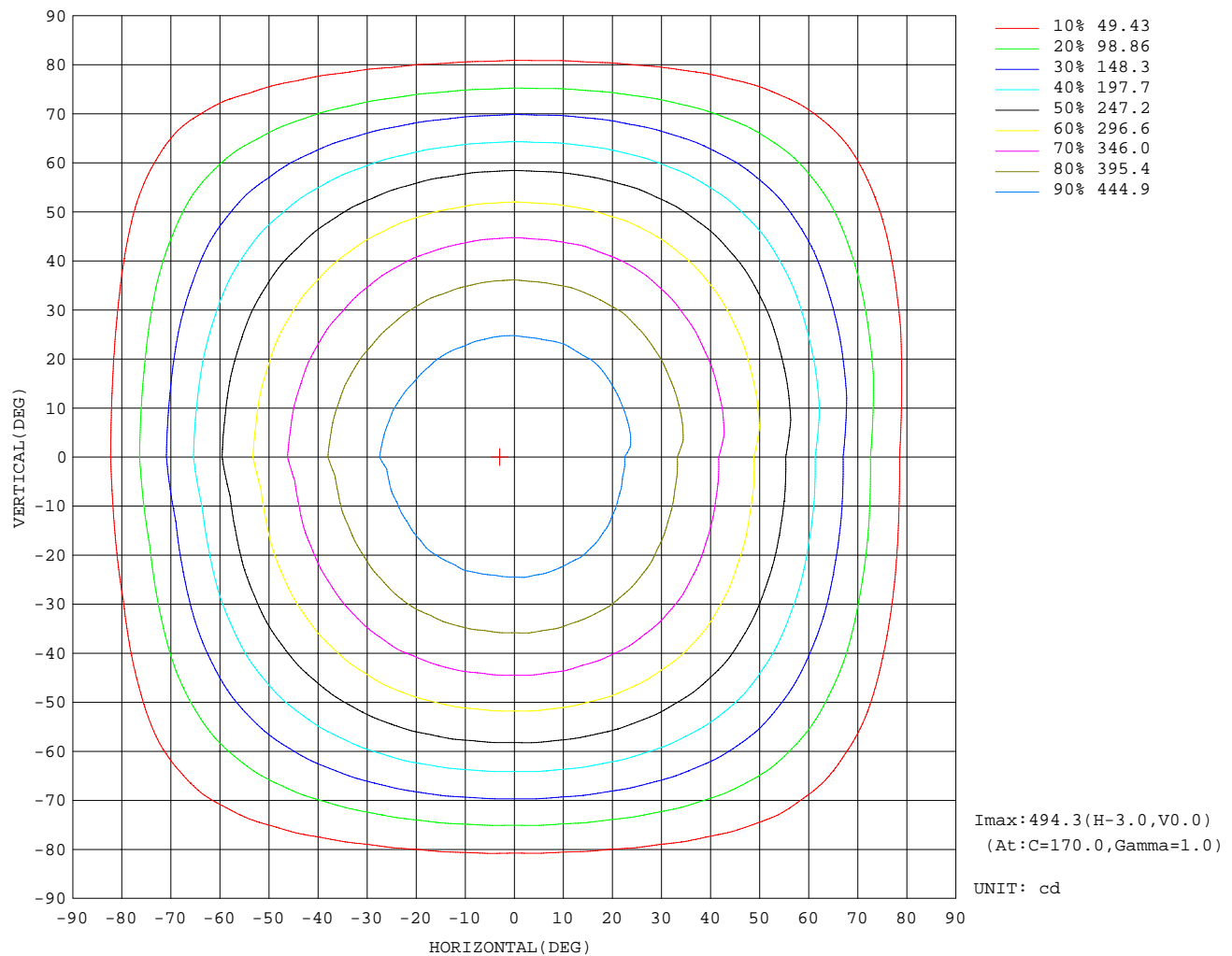
### UTILIZATION FACTORS TABLE

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	57	45	38	56	45	38	55	45	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	76	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	65	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	86	78
4.00	106	101	96	104	99	94	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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:13 October 2015

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:

## ISOCANDELA DIAGRAM

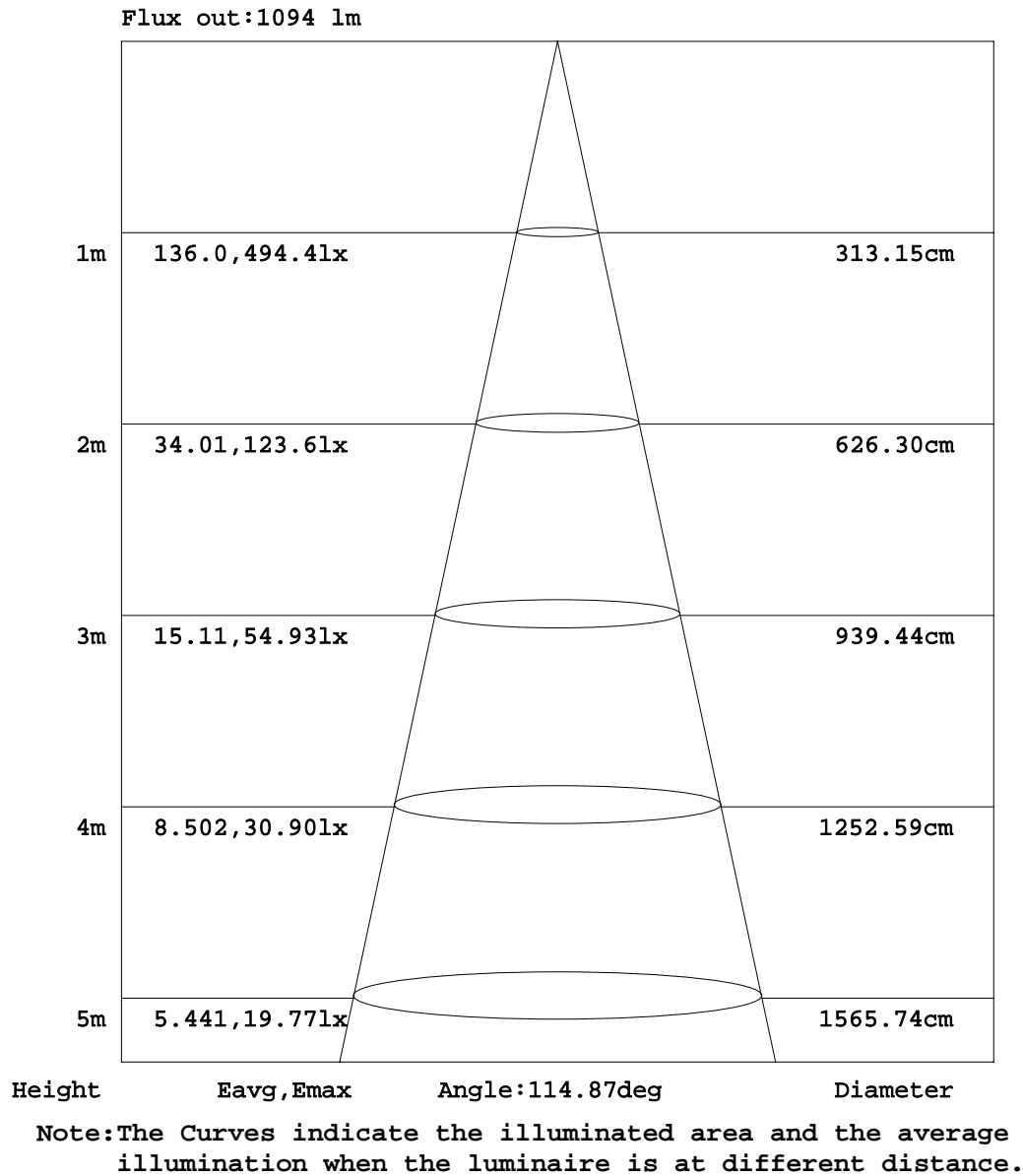


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 13 October 2015

$\gamma$  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:



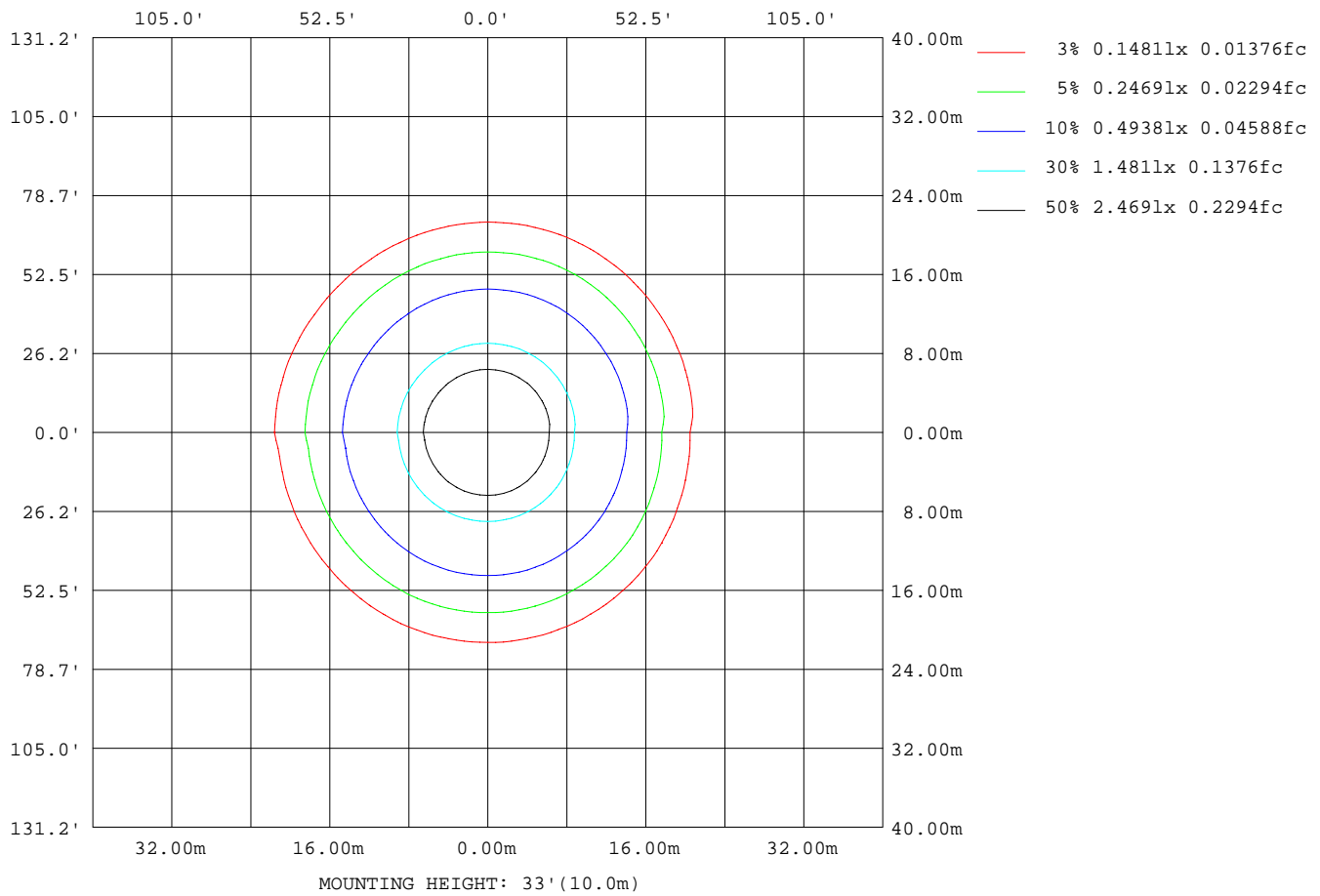
### AAI Figure



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:13 October 2015

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:

ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 13 October 2015

$\gamma$  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:24.01V I:0.7864A P:18.88W PF:1.000 Lamp Flux:1450.45x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:
SPEC.:2835 120LED WW	DIM.: 1000*8*1MM	SERIAL No.:2015072402
MFR.:	SUR.:1000*8mm	Shielding Angle:

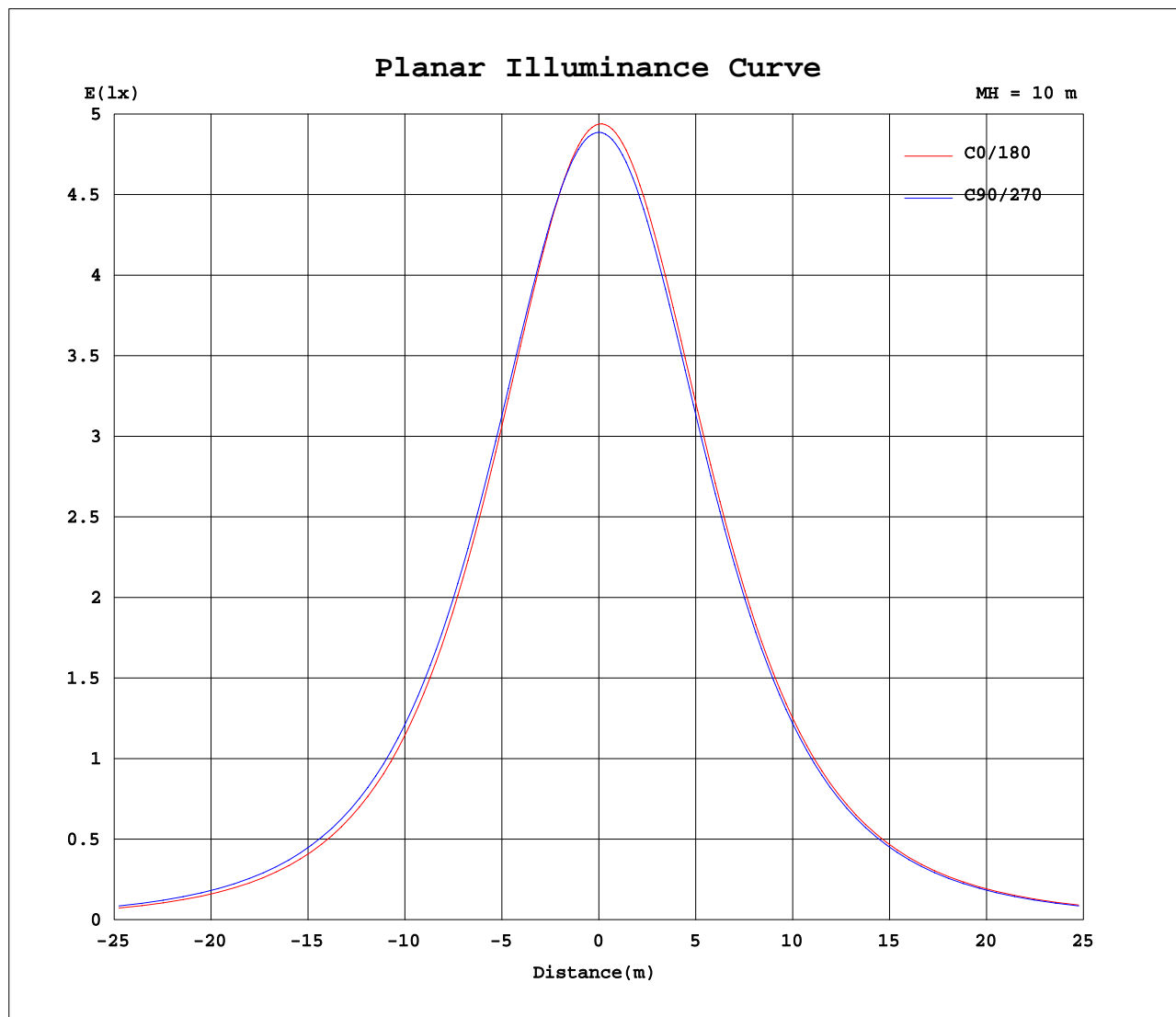
AvgL	cd/m2
L_0~180(65)av	43419
L_0~180(75)av	36577
L_0~180(85)av	23411
L_90~270(65)av	45168
L_90~270(75)av	38767
L_90~270(85)av	22158
L_45(65)av	44183
L_45(75)av	37286
L_45(85)av	21634

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:13 October 2015

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:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 13 October 2015

$\gamma$  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	494	493	492	492	491	491	491	490	490	490	490	490	489	489	489	489	489	489	489
5	490	489	488	488	488	488	488	488	488	488	488	488	487	487	487	487	487	487	487
10	482	481	481	481	481	481	481	481	481	482	482	482	481	481	481	481	481	482	481
15	470	470	469	469	469	470	470	471	471	472	472	472	472	472	472	472	472	473	472
20	454	454	454	454	455	455	456	457	457	458	459	459	459	459	459	459	459	460	459
25	435	435	435	436	436	437	438	439	440	441	441	443	442	442	443	443	443	444	443
30	412	413	412	413	414	416	416	418	419	420	421	422	422	422	423	423	423	424	423
35	386	387	386	388	388	390	391	394	395	396	397	398	398	399	399	400	400	401	400
40	356	357	357	359	360	362	363	366	367	368	369	371	371	372	372	373	373	374	373
45	324	325	325	327	328	330	332	335	336	338	338	340	341	342	341	343	343	343	343
50	288	290	290	292	293	295	297	300	301	303	304	306	307	308	308	309	309	310	309
55	250	251	251	253	255	257	259	263	264	266	267	269	270	271	271	273	272	273	273
60	209	210	211	213	214	217	219	223	224	226	227	229	229	231	232	233	233	234	233
65	166	168	168	170	171	175	176	180	181	184	184	186	187	189	189	190	190	191	190
70	121	123	124	126	127	130	132	136	137	139	140	141	142	144	144	145	145	146	145
75	78.0	79.7	80.3	82.4	83.4	86.3	88.0	91.2	92.3	94.2	94.5	96.4	96.4	98.0	98.1	99.5	99.2	101	99.7
80	38.6	40.2	40.4	42.5	42.9	45.6	46.7	49.7	50.2	51.9	51.9	53.4	53.2	54.7	54.2	55.7	55.2	56.5	55.7
85	10.7	11.5	11.7	12.8	13.1	14.6	15.2	16.9	17.1	18.0	17.8	18.6	18.2	18.9	18.3	19.1	18.9	19.7	19.3
90	0.00	0.00	0.01	0.00	0.01	0.00	0.02	0.31	0.20	0.35	0.05	0.10	0.02	0.00	0.02	0.00	0.01	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:13 October 2015

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	488	488	489	490	491	491	491	492	493	493	493	493	493	493	494	494	494	494	493
5	487	486	487	488	489	489	489	490	492	491	491	491	491	491	492	493	493	494	493
10	481	481	481	482	483	483	484	485	486	486	486	486	486	486	487	488	488	490	489
15	472	472	472	473	474	474	475	476	477	476	476	476	477	477	478	479	479	482	480
20	459	459	460	460	462	461	462	463	464	463	463	463	464	464	465	466	466	470	469
25	443	443	444	444	445	445	446	446	447	446	447	446	447	447	448	449	449	454	453
30	423	423	424	424	425	425	426	426	427	426	426	426	426	427	428	428	429	435	433
35	400	400	401	401	402	401	402	403	403	402	402	402	402	402	404	404	405	411	410
40	374	373	374	374	375	374	376	375	375	374	374	374	374	374	376	376	376	384	383
45	343	343	344	344	344	344	345	344	344	343	343	343	343	343	345	344	346	354	352
50	310	309	311	310	311	310	311	309	310	308	309	308	309	309	310	310	311	320	319
55	273	273	274	273	274	273	273	272	272	270	271	270	271	271	272	272	273	284	281
60	233	233	234	233	234	232	232	231	231	230	230	230	231	230	232	231	233	244	241
65	191	190	191	190	191	189	189	187	188	187	187	187	188	187	188	188	190	201	199
70	146	145	146	145	145	143	143	142	142	142	142	141	142	142	143	143	144	157	154
75	100	99.8	100	99.0	98.9	97.4	97.3	96.2	96.7	96.1	96.7	96.2	97.2	97.0	98.2	98.2	99.7	111	109
80	56.7	55.8	56.2	54.5	54.7	53.2	53.8	52.8	53.6	52.9	54.0	53.4	54.9	54.4	56.0	55.7	57.4	67.9	66.0
85	20.3	19.6	19.4	18.2	18.4	17.6	18.1	17.7	18.5	18.2	19.0	18.9	19.9	19.9	20.8	20.9	22.0	30.1	28.4
90	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.02	0.00	0.03	0.39	0.39	0.98	4.82	3.99
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:13 October 2015

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	492	492	491	491	491	490	490	490	490	490	489	489	489	489	489	489	489	488	488
5	492	491	491	490	490	489	489	489	489	488	488	487	487	487	487	487	487	487	487
10	488	487	486	485	485	484	484	484	484	483	482	482	482	482	482	482	482	481	481
15	479	479	478	477	476	475	475	475	475	474	473	473	473	473	473	473	473	472	472
20	468	466	466	465	464	463	462	462	462	462	461	460	460	460	460	460	460	459	460
25	452	450	450	448	448	446	446	445	446	445	445	444	444	444	444	444	444	443	443
30	432	431	430	429	428	426	426	425	425	425	425	424	424	424	424	424	424	424	424
35	409	407	407	405	404	402	402	401	402	401	401	400	401	401	401	401	401	400	400
40	382	380	380	378	377	375	375	374	374	374	374	373	374	374	374	374	374	373	374
45	352	349	349	347	346	344	344	343	343	343	344	343	343	343	344	344	344	343	344
50	318	316	315	313	312	310	310	309	309	309	310	309	310	309	310	310	311	310	311
55	281	278	278	276	275	272	272	271	272	271	272	272	273	272	274	273	274	273	274
60	241	239	238	236	235	232	232	231	231	231	232	231	233	232	234	233	234	234	235
65	199	196	196	193	192	189	189	188	188	187	188	188	190	189	191	191	192	191	192
70	154	151	151	148	147	144	144	142	143	142	143	143	144	144	146	145	147	146	148
75	109	106	106	103	101	98.4	98.1	96.8	97.3	96.4	97.5	96.8	98.2	98.0	99.5	99.5	101	101	102
80	65.6	63.3	62.7	59.8	58.7	55.6	55.4	53.6	53.9	52.8	53.6	52.9	54.4	53.9	55.5	55.3	56.9	56.4	57.5
85	28.4	26.7	26.0	24.1	22.9	20.5	20.2	19.0	19.1	18.1	18.4	17.7	18.3	17.8	18.7	18.5	19.4	19.1	19.9
90	3.96	3.13	2.95	2.08	1.76	0.89	0.79	0.30	0.29	0.02	0.00	0.01	0.00	0.01	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:13 October 2015

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	489	490	491	491	491	492	493	493	493	493	493	493	494	494	494				
5	487	488	489	489	489	490	491	491	490	490	491	491	491	491	491				
10	481	482	483	483	483	484	485	485	484	484	484	484	484	485	484				
15	472	473	474	474	474	475	476	475	474	474	474	474	474	474	473				
20	460	461	461	461	461	462	462	461	461	460	460	460	460	460	459				
25	443	444	445	444	444	445	445	444	443	443	442	442	442	441	440				
30	424	425	425	424	424	425	424	423	422	422	421	421	420	420	418				
35	401	401	401	401	401	402	400	399	398	398	396	396	395	395	393				
40	374	375	374	374	374	374	372	372	370	370	368	368	367	366	364				
45	344	345	344	344	344	343	341	341	339	339	337	337	335	335	332				
50	311	311	310	311	310	309	307	307	305	304	303	303	301	300	298				
55	274	274	274	274	272	272	270	270	268	267	265	265	263	262	260				
60	235	235	234	234	232	232	230	230	228	227	226	225	223	222	220				
65	192	192	191	191	190	190	188	187	186	185	183	183	181	180	178				
70	147	148	146	146	145	145	143	143	141	141	139	138	136	136	133				
75	101	101	100	101	99.5	99.6	98.3	98.2	96.7	96.2	94.5	93.9	92.0	91.3	89.3				
80	56.5	57.3	56.3	57.0	56.0	56.6	55.4	55.6	54.2	53.9	52.7	52.3	50.8	50.2	48.7				
85	19.4	20.1	19.7	20.4	19.9	20.5	19.9	20.3	19.5	19.7	18.8	18.9	17.8	17.8	16.6				
90	0.01	0.00	0.02	0.42	0.56	1.08	1.18	1.62	1.61	1.89	1.75	1.89	1.59	1.60	1.20				
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:13 October 2015

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: