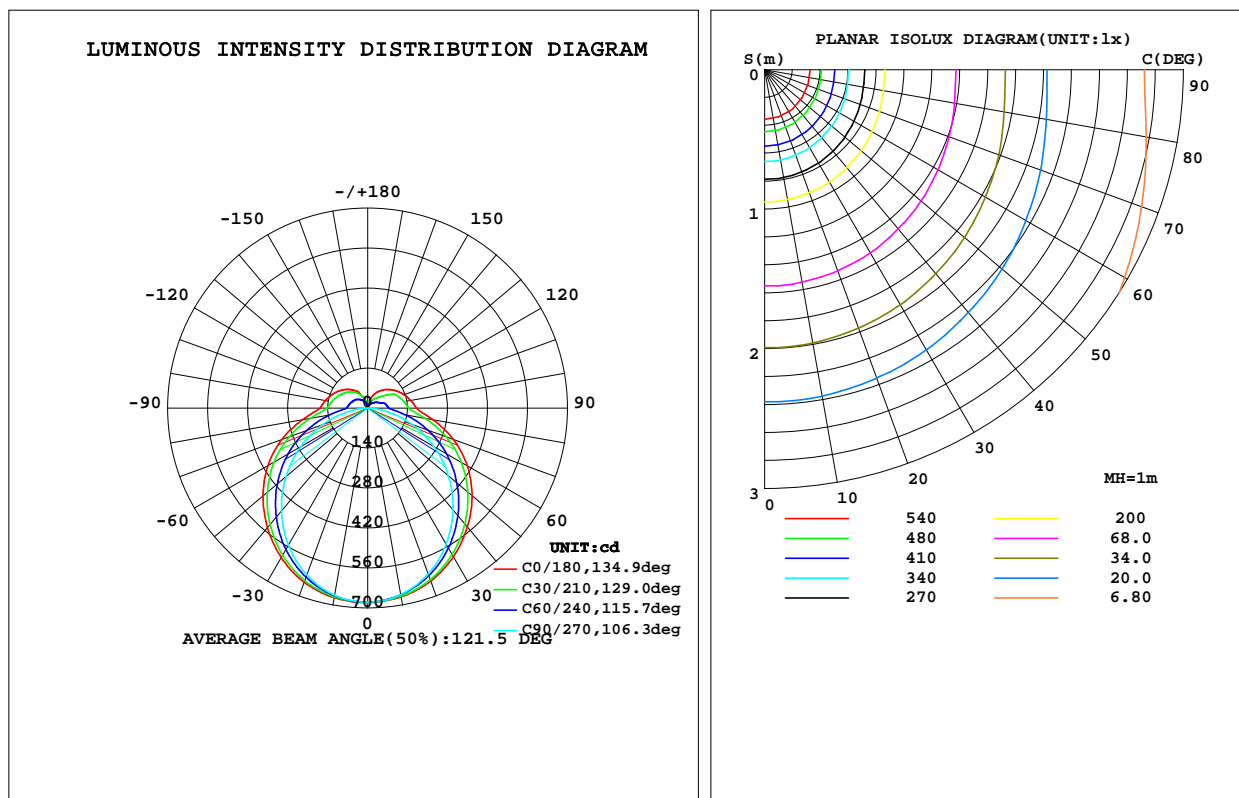


## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.37 lm/W			
MODEL	TB4-DM-35F	I <sub>max</sub> (cd)	681.7	S/MH(C0/180)	1.32
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	100-277	TOTAL FLUX(lm)	2637.8	η UP,DN(C0-180)	7.7,42.1
NOMINAL FLUX(lm)	7.32709	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	7.8,42.5
LAMPS INSIDE	360	η up(%)	15.5	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	84.5	CIBSE SHR MAX	1.50



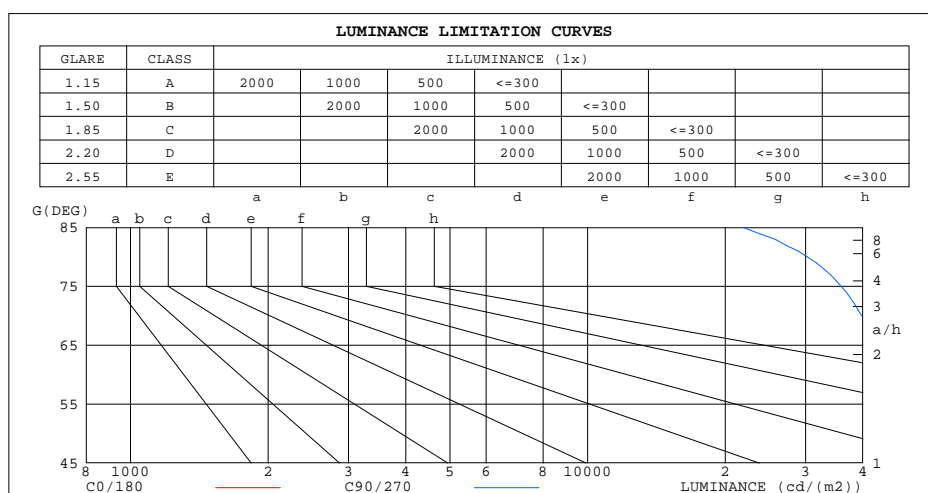
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2018-12-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:8.317m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	671.5	666.2	663.4	667.1	674.3	669.2	665.3	667.2	0- 10	64.32	64.32	2.44, 2.44
20	645.0	632.4	618.5	633.1	649.3	637.2	622.0	634.4	10- 20	184.5	248.8	9.43, 9.43
30	600.7	579.3	550.1	578.8	605.0	585.0	554.8	582.0	20- 30	280.7	529.5	20.1, 20.1
40	543.4	511.8	465.0	509.3	546.2	516.5	469.9	514.2	30- 40	341.8	871.3	33, 33
50	477.1	434.4	369.6	429.9	478.2	437.9	373.9	436.3	40- 50	363.6	1235	46.8, 46.8
60	402.3	350.0	267.0	344.2	402.9	352.6	271.2	350.9	50- 60	346.9	1582	60, 60
70	318.5	259.9	163.3	253.5	319.2	261.3	164.6	259.1	60- 70	295.2	1877	71.2, 71.2
80	230.7	170.4	62.98	164.0	230.8	171.5	62.15	168.8	70- 80	216.6	2094	79.4, 79.4
90	171.5	112.0	2.868	104.7	167.7	111.6	2.704	109.6	80- 90	135.8	2229	84.5, 84.5
100	154.2	101.5	2.226	95.24	151.3	101.4	2.672	99.36	90-100	103.8	2333	88.5, 88.5
110	136.8	91.22	1.986	86.14	135.4	91.67	2.182	82.50	100-110	90.64	2424	91.9, 91.9
120	119.7	63.97	2.654	76.75	119.1	81.58	2.564	63.54	110-120	73.97	2498	94.7, 94.7
130	101.7	47.71	3.363	66.72	102.2	70.80	3.241	51.19	120-130	56.25	2554	96.8, 96.8
140	83.19	35.32	3.980	54.65	84.16	58.59	3.872	39.39	130-140	39.56	2594	98.3, 98.3
150	63.58	25.46	4.439	41.13	64.83	44.40	4.364	28.71	140-150	24.98	2619	99.3, 99.3
160	41.16	21.13	4.926	28.51	40.95	30.00	4.791	22.19	150-160	13.18	2632	99.8, 99.8
170	13.44	13.66	5.167	16.11	12.76	16.73	5.065	13.87	160-170	5.133	2637	100, 100
180	5.121	5.100	5.246	5.179	5.125	5.109	5.236	5.176	170-180	0.8660	2638	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	184483	21890
80	110715	30225
75	88255	35903
70	77613	39777
65	71306	42454
60	67047	44504
55	64058	46412
50	61857	47919
45	60250	49277

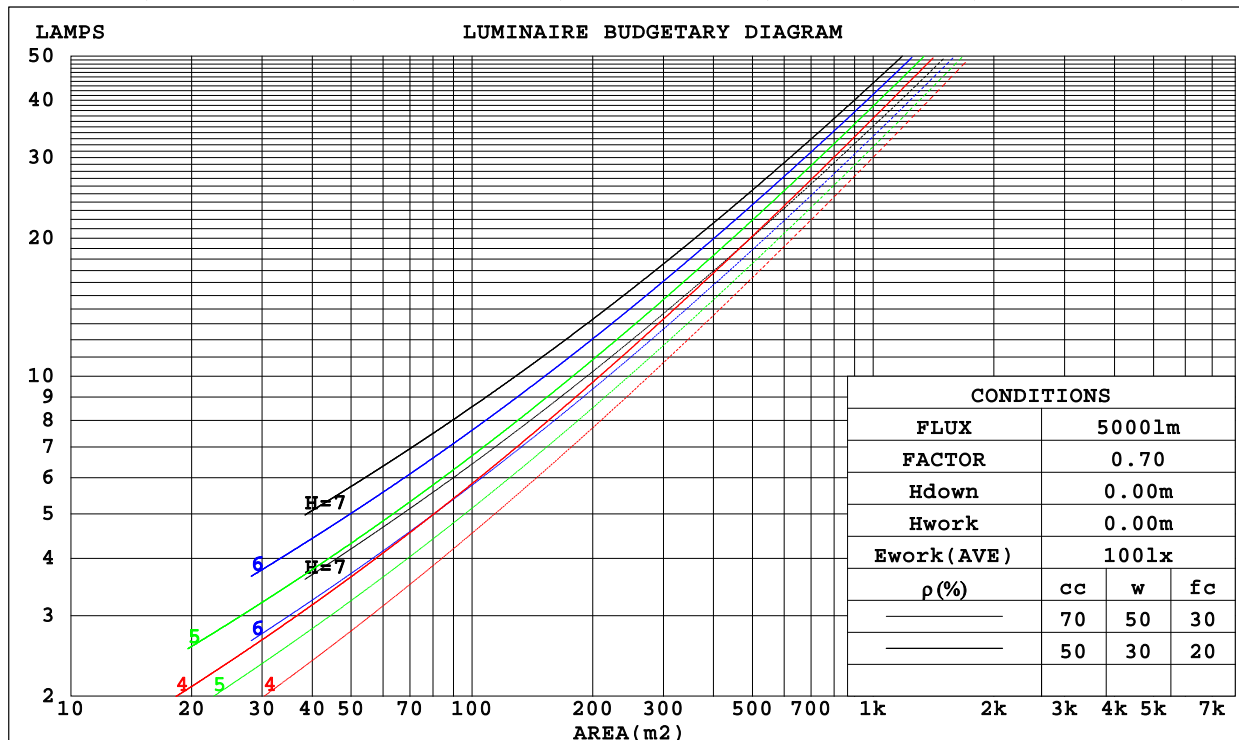
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2018-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity: 65.0%  
Test Distance: 8.317m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

$\rho_{cc}$	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	1.15	1.15	1.15	1.11	1.11	1.11	1.03	1.03	1.03	.95	.95	.95	.88	.88	.88	.85
1.0	.98	.93	.89	.94	.90	.86	.87	.83	.80	.80	.78	.75	.74	.72	.70	.67
2.0	.84	.77	.71	.81	.74	.69	.75	.70	.65	.69	.65	.61	.64	.61	.57	.54
3.0	.74	.65	.58	.71	.63	.56	.66	.59	.54	.61	.55	.51	.56	.52	.48	.45
4.0	.65	.56	.49	.62	.54	.47	.58	.51	.45	.54	.48	.43	.50	.45	.41	.38
5.0	.58	.48	.42	.56	.47	.41	.52	.44	.39	.48	.42	.37	.45	.39	.35	.33
6.0	.52	.43	.36	.50	.41	.35	.47	.39	.34	.43	.37	.32	.40	.35	.31	.28
7.0	.47	.38	.32	.45	.37	.31	.42	.35	.30	.39	.33	.28	.37	.31	.27	.25
8.0	.42	.34	.28	.41	.33	.27	.39	.31	.26	.36	.30	.25	.34	.28	.24	.22
9.0	.39	.31	.25	.38	.30	.25	.35	.28	.24	.33	.27	.23	.31	.26	.22	.20
10.0	.36	.28	.23	.35	.27	.22	.33	.26	.21	.31	.25	.21	.29	.24	.20	.18



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2018-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 8.317m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.353	.201	.064	.341	.194	.062	.319	.183	.058	.298	.172	.055	.279	.162	.052	
2.0	.314	.172	.053	.303	.167	.051	.283	.158	.049	.265	.149	.047	.248	.140	.044	
3.0	.283	.151	.045	.274	.147	.044	.256	.138	.042	.239	.131	.040	.223	.124	.038	
4.0	.257	.134	.039	.249	.130	.038	.232	.123	.037	.217	.117	.035	.203	.110	.034	
5.0	.235	.120	.035	.228	.117	.034	.213	.111	.033	.199	.105	.031	.186	.099	.030	
6.0	.217	.109	.031	.210	.106	.030	.196	.101	.029	.183	.095	.028	.172	.090	.027	
7.0	.201	.099	.028	.194	.097	.028	.182	.092	.026	.170	.087	.025	.159	.083	.024	
8.0	.187	.091	.026	.181	.089	.025	.169	.085	.024	.159	.080	.023	.149	.076	.022	
9.0	.174	.084	.024	.169	.082	.023	.158	.078	.022	.149	.075	.021	.139	.071	.020	
10.0	.163	.078	.022	.158	.077	.021	.149	.073	.021	.140	.069	.020	.131	.066	.019	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio                      Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.308	.308	.308	.264	.264	.264	.180	.180	.180	.103	.103	.103	.033	.033	.033	
1.0	.302	.275	.250	.259	.236	.215	.177	.162	.149	.102	.094	.087	.033	.030	.028	
2.0	.295	.252	.215	.253	.217	.186	.173	.150	.130	.100	.087	.076	.032	.028	.025	
3.0	.287	.235	.193	.246	.203	.167	.169	.141	.117	.098	.082	.069	.031	.027	.023	
4.0	.280	.222	.178	.240	.192	.155	.165	.134	.109	.096	.078	.064	.031	.026	.021	
5.0	.272	.212	.168	.234	.184	.146	.161	.128	.103	.093	.075	.061	.030	.025	.020	
6.0	.265	.204	.160	.228	.177	.140	.157	.124	.099	.091	.073	.059	.029	.024	.019	
7.0	.258	.197	.155	.222	.171	.135	.153	.120	.096	.089	.071	.057	.029	.023	.019	
8.0	.252	.192	.151	.217	.166	.132	.150	.117	.093	.087	.069	.056	.028	.023	.018	
9.0	.245	.187	.148	.211	.162	.129	.147	.114	.091	.085	.067	.055	.028	.022	.018	
10.0	.240	.183	.145	.207	.159	.127	.143	.112	.090	.084	.066	.054	.027	.022	.018	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2018-12-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:8.317m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm											
NAME: TB4-DM-35F					TYPE:LED			WEIGHT:			
SPEC.:					DIM.: 4FT			SERIAL No.:1			
MFR.: EVERFINE					SUR.:			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	26.7	28.1	27.2	28.6	29.1	25.1	26.4	25.5	26.9	27.4	
	3H	29.0	30.3	29.5	30.8	31.3	26.5	27.7	27.0	28.2	28.8
	4H	30.2	31.4	30.7	31.9	32.5	27.0	28.2	27.6	28.7	29.3
	6H	31.4	32.5	32.0	33.1	33.7	27.4	28.5	27.9	29.0	29.6
	8H	32.1	33.1	32.6	33.7	34.3	27.5	28.6	28.0	29.1	29.7
	12H	32.8	33.8	33.4	34.4	35.0	27.5	28.5	28.1	29.1	29.7
4H	2H	27.3	28.5	27.8	29.0	29.5	26.0	27.2	26.6	27.7	28.3
	3H	29.8	30.8	30.3	31.4	32.0	27.7	28.7	28.3	29.3	29.9
	4H	31.1	32.1	31.7	32.7	33.3	28.4	29.4	29.0	29.9	30.6
	6H	32.6	33.4	33.2	34.0	34.7	28.9	29.8	29.5	30.4	31.1
	8H	33.3	34.1	34.0	34.7	35.5	29.1	29.9	29.7	30.5	31.2
	12H	34.2	34.9	34.9	35.6	36.3	29.2	29.9	29.8	30.5	31.2
8H	4H	31.4	32.2	32.0	32.8	33.5	29.2	30.0	29.8	30.6	31.3
	6H	33.1	33.8	33.8	34.4	35.2	30.0	30.7	30.6	31.3	32.1
	8H	34.1	34.7	34.8	35.3	36.1	30.3	30.9	31.0	31.6	32.3
	12H	35.2	35.7	35.9	36.4	37.2	30.5	31.0	31.2	31.7	32.5
12H	4H	31.4	32.1	32.1	32.8	33.5	29.4	30.1	30.0	30.7	31.5
	6H	33.2	33.8	33.9	34.5	35.2	30.4	31.0	31.0	31.6	32.4
	8H	34.3	34.8	35.0	35.5	36.3	30.8	31.3	31.5	32.0	32.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 2638 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.4)

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:8.317m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

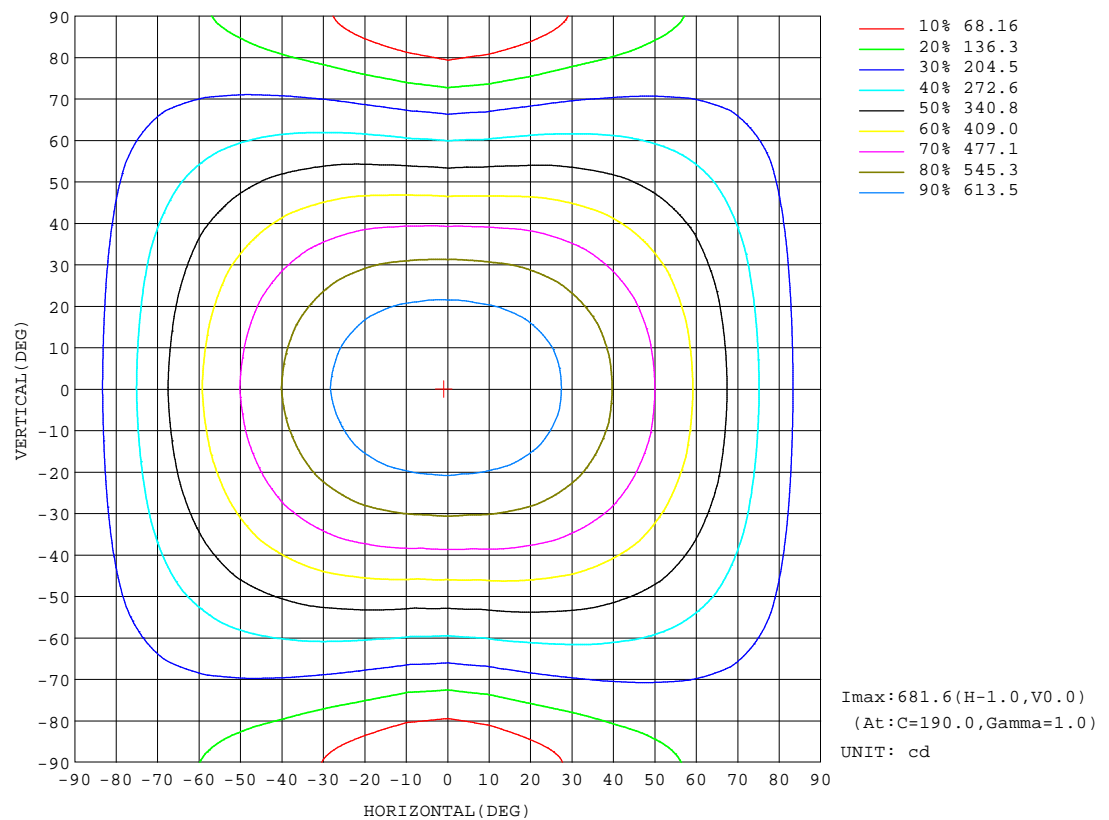
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	50	38	31	49	38	31	47	37	31	24
0.80	60	47	40	58	47	39	56	45	38	31
1.00	68	55	47	66	54	47	62	55	46	37
1.25	75	63	55	72	61	54	68	59	52	43
1.50	80	68	60	77	67	59	73	64	57	47
2.00	87	77	69	84	75	68	79	71	65	54
2.50	91	82	75	88	80	73	82	75	70	58
3.00	95	86	80	91	84	78	85	79	74	61
4.00	99	92	86	96	89	84	89	84	79	66
5.00	102	96	91	98	93	88	91	87	83	69
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity:65.0%  
 Test Distance:8.317m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



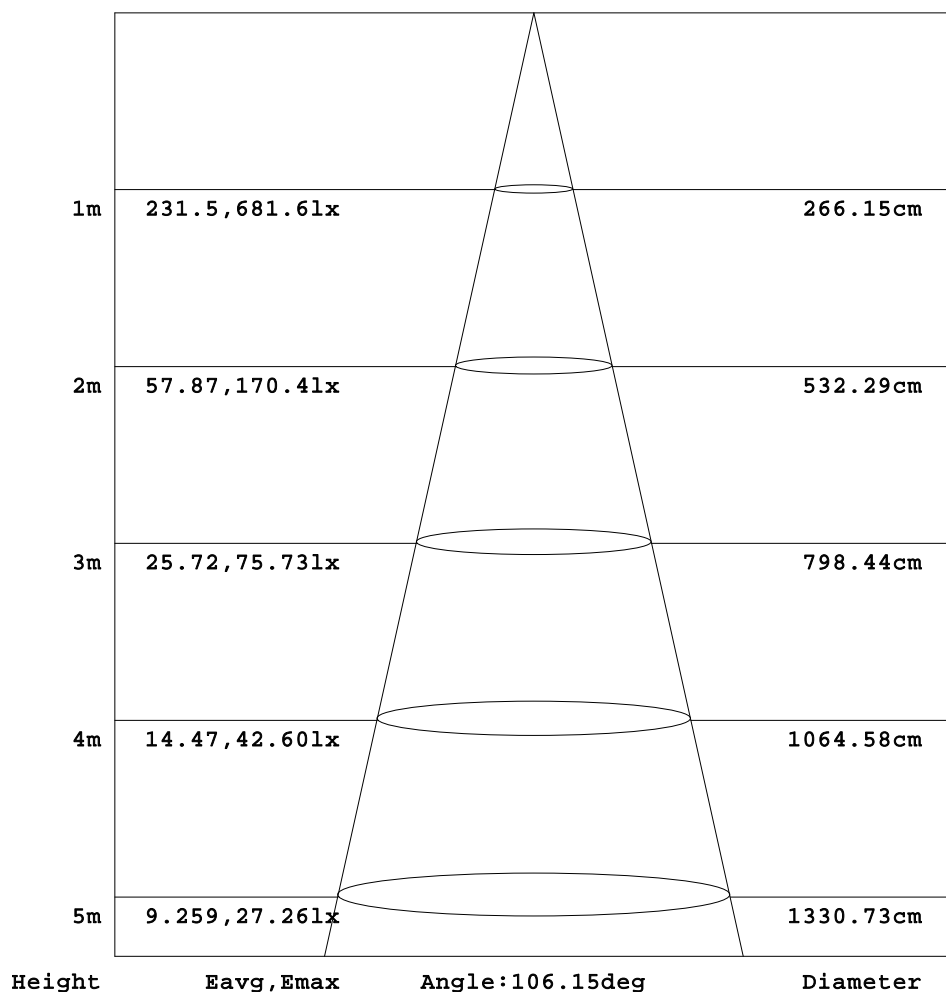
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2018-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 8.317m [K=1.0000]  
 Remarks:

## AAI Figure

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Flux out:1378 lm



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

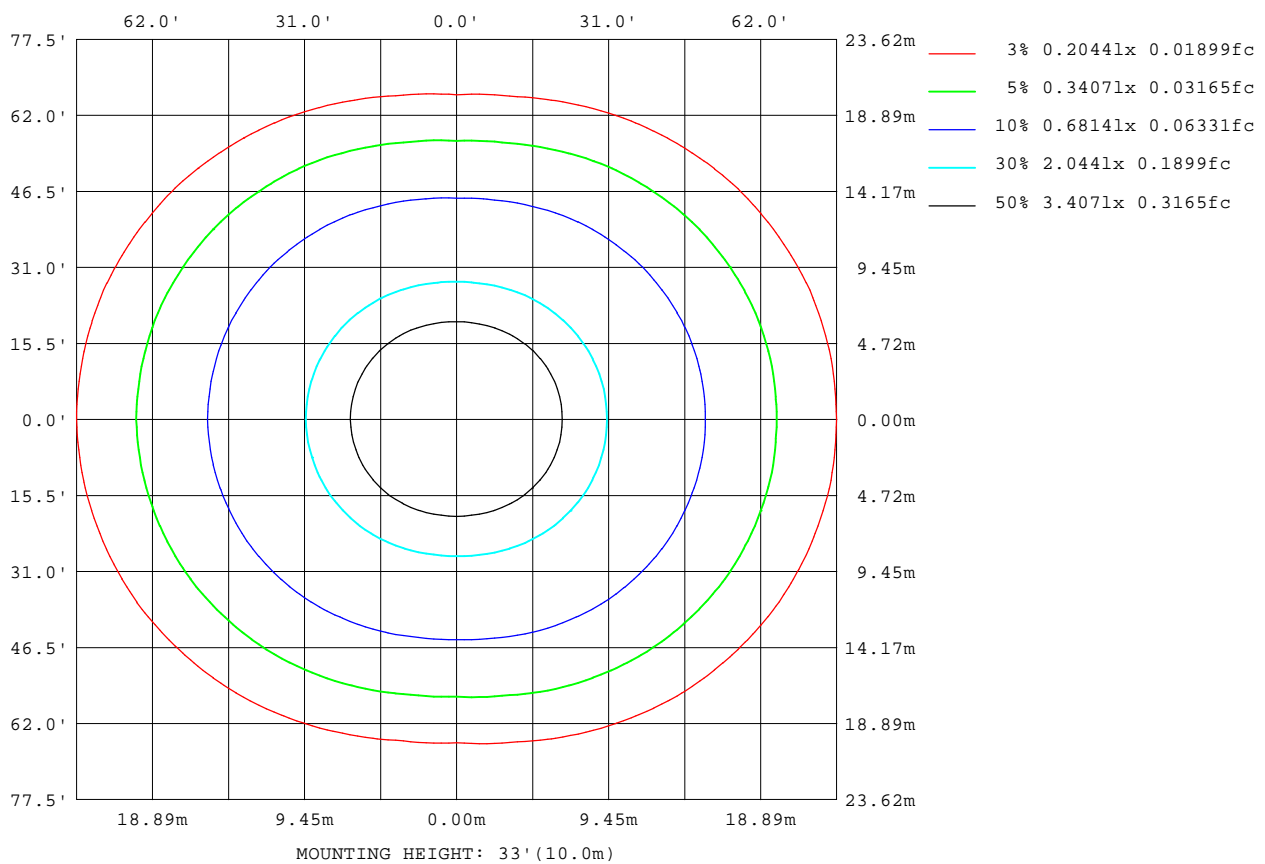
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2018-12-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 8.317m [K=1.0000]  
 Remarks:



## ISOLUX DIAGRAM

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2018-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
 Humidity: 65.0%  
 Test Distance: 8.317m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

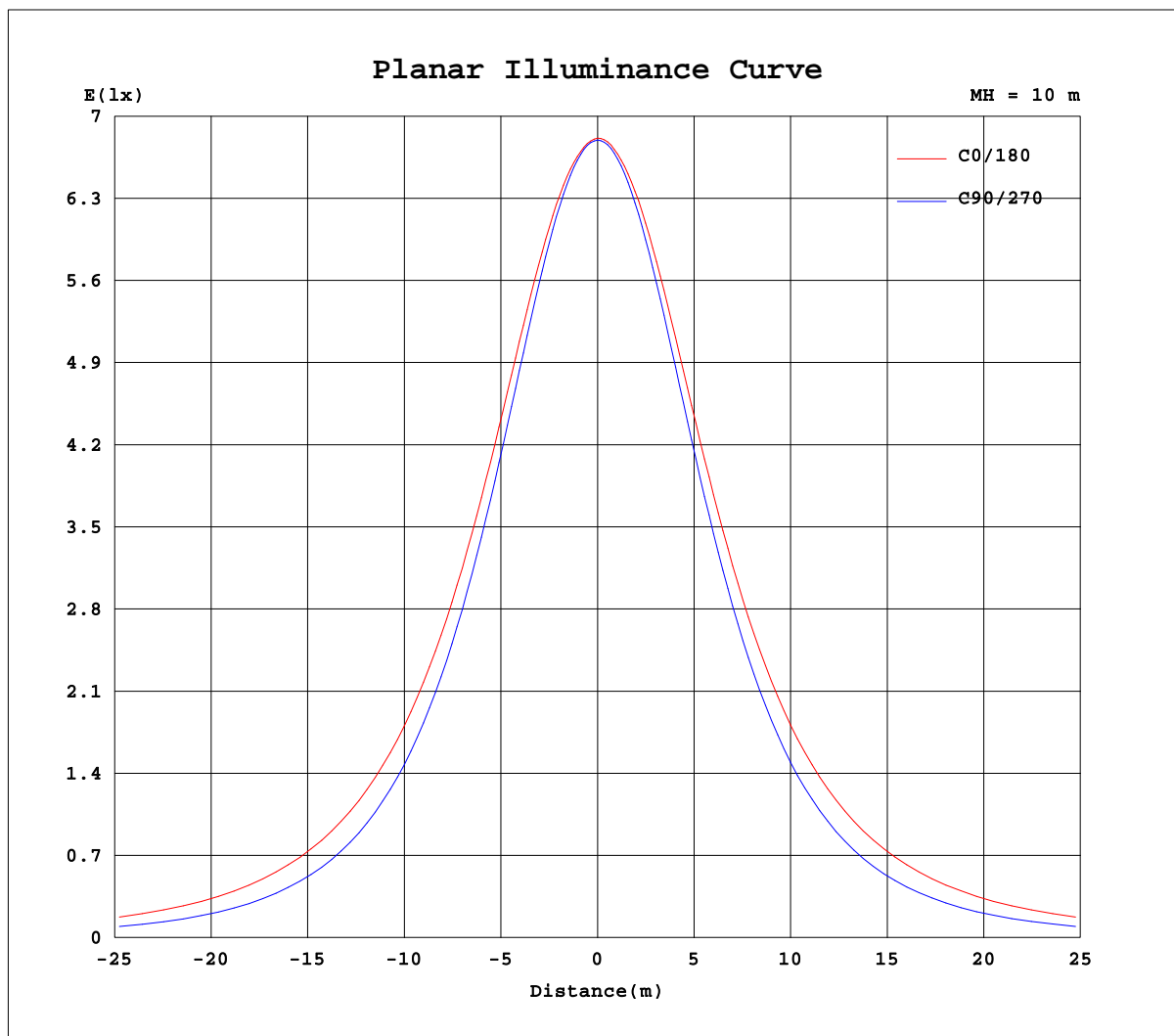
AvgL	cd/m2
L_0~180(65)av	71354
L_0~180(75)av	88146
L_0~180(85)av	184184
L_90~270(65)av	42718
L_90~270(75)av	35889
L_90~270(85)av	21492
L_45(65)av	60145
L_45(75)av	68557
L_45(85)av	125314

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2018-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:8.317m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2018-12-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity: 65.0%  
Test Distance: 8.317m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEC) γ (DEC)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	681	682	681	680	680	680	680	680	680	680	680	680	680	680	680	680	680	681	681
5	678	678	678	677	676	675	675	675	675	675	675	676	676	676	677	677	677	678	680
10	671	671	670	669	667	665	664	663	663	663	663	664	665	666	668	670	671	672	674
15	661	661	659	657	653	651	647	645	644	644	644	646	648	651	654	658	660	662	664
20	645	645	642	640	635	630	625	621	618	619	619	622	625	631	635	641	644	647	649
25	625	625	621	618	611	605	598	592	587	587	587	592	597	605	611	618	622	626	629
30	601	600	596	591	583	575	566	558	551	550	550	557	565	575	583	591	597	601	605
35	573	573	568	562	552	542	530	520	511	509	510	519	528	541	550	561	567	573	577
40	543	542	537	529	518	506	492	480	468	465	467	477	489	503	515	527	535	542	546
45	511	510	503	494	481	467	451	436	422	418	420	433	447	464	477	491	500	508	513
50	477	476	468	457	442	427	408	391	375	370	373	388	404	422	438	453	464	473	478
55	441	439	430	419	402	384	364	345	326	319	324	340	358	379	396	414	426	436	442
60	402	401	391	378	360	340	318	297	277	267	273	292	312	335	354	373	386	397	403
65	362	360	349	336	316	296	271	248	226	215	222	242	265	289	310	330	344	356	362
70	319	317	306	292	271	249	224	199	176	163	171	193	218	242	265	286	301	313	319
75	274	271	262	246	226	202	177	151	125	112	120	145	170	196	219	240	256	267	273
80	231	228	218	203	182	159	132	105	78.3	63.0	73.4	99.1	125	152	176	197	213	224	231
85	193	190	181	165	144	121	94.2	67.4	39.7	22.9	34.6	60.9	87.6	115	138	159	176	186	192
90	171	168	159	144	124	100	74.3	47.1	20.3	2.87	15.1	40.3	67.2	93.1	116	137	153	163	168
95	162	159	151	136	118	95.4	70.4	44.1	18.6	2.42	13.8	37.8	63.7	88.6	111	130	145	154	159
100	154	151	143	130	112	90.9	67.1	42.0	17.7	2.23	13.4	36.0	60.8	84.6	106	124	138	147	151
105	145	143	135	123	106	86.5	63.7	39.4	17.2	1.94	13.1	34.6	58.1	80.7	101	118	131	139	143
110	137	135	128	116	101	81.8	52.4	34.2	15.0	1.99	11.9	33.3	55.4	76.7	95.5	112	124	132	135
115	128	127	120	109	89.2	65.2	46.9	29.6	12.8	2.32	11.6	32.2	52.8	72.7	90.3	105	116	124	127
120	120	118	112	98.5	73.0	55.0	40.8	26.0	10.8	2.65	10.8	30.5	50.1	68.6	84.9	98.7	109	116	119
125	111	109	104	80.4	60.2	48.8	35.7	23.1	9.88	3.01	10.7	27.9	47.3	64.3	79.3	92.0	101	108	111
130	102	100	90.9	65.3	53.2	42.3	31.3	20.0	9.39	3.36	10.6	26.0	44.1	59.9	73.6	85.1	93.6	99.4	102
135	92.5	91.4	74.0	54.8	45.5	36.7	27.6	17.1	8.98	3.69	10.4	24.4	39.1	55.2	67.5	78.0	85.6	90.8	93.4
140	83.2	82.2	56.0	46.5	38.9	31.7	23.3	15.2	8.81	3.98	10.2	21.9	35.2	48.1	61.3	70.5	77.2	81.9	84.2
145	73.5	68.4	45.1	39.2	32.9	27.1	21.1	15.5	9.30	4.22	9.91	20.2	31.8	42.2	52.5	62.8	68.5	72.6	74.7
150	63.6	51.7	36.2	32.3	26.9	24.0	20.6	15.1	9.33	4.44	8.60	18.0	27.6	37.3	44.9	53.0	58.2	62.7	64.8
155	53.4	33.4	28.4	24.6	23.6	22.8	19.1	14.1	9.20	4.68	5.18	16.0	23.7	31.8	38.6	44.2	48.1	51.9	43.4
160	41.2	22.0	22.2	20.6	22.0	20.3	16.9	12.8	8.46	4.93	4.90	14.0	19.7	25.8	31.2	36.0	39.0	41.2	41.0
165	19.7	16.1	17.0	18.4	18.5	17.0	14.2	11.1	5.26	5.08	5.06	10.4	16.0	20.2	23.8	27.3	29.5	31.0	20.4
170	13.4	11.6	13.0	14.7	14.2	13.1	11.2	7.81	5.07	5.17	5.13	5.26	10.2	15.1	17.2	19.1	20.1	20.1	12.8
175	7.67	8.22	9.54	9.96	8.67	6.03	5.12	5.11	5.12	5.24	5.19	5.25	5.29	5.27	5.42	7.12	9.14	10.5	8.29
180	5.12	5.09	5.13	5.13	5.10	5.10	5.12	5.13	5.20	5.25	5.19	5.21	5.21	5.19	5.17	5.17	5.16	5.13	5.13

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2018-12-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:8.317m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:0.1726A P:20.39W PF:0.9830 Lamp Flux:7.32709x360 lm		
NAME: TB4-DM-35F	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEC) γ (DEC)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	682	681	680	680	680	680	680	680	680	680	680	680	680	680	680	680	681		
5	679	679	678	678	677	677	677	677	676	676	676	676	676	676	677	677	677		
10	673	672	671	670	668	667	666	666	665	666	665	666	666	668	669	671	671		
15	663	662	660	658	654	652	649	648	647	647	648	650	652	655	657	660	660		
20	648	647	643	640	635	630	626	624	622	623	624	628	632	637	640	644	645		
25	628	626	621	617	610	604	597	593	591	592	595	601	607	614	619	623	625		
30	603	601	595	589	581	573	563	558	555	557	561	570	578	586	593	599	601		
35	575	572	565	558	547	537	526	518	514	517	523	534	544	555	563	570	573		
40	544	540	532	523	510	498	484	475	470	473	482	496	508	521	531	539	543		
45	511	506	496	486	471	457	441	429	423	427	438	454	469	484	496	506	511		
50	476	470	459	446	430	414	395	381	374	379	393	411	428	445	458	470	476		
55	439	432	420	405	387	369	348	332	323	330	345	366	385	404	419	433	440		
60	400	393	379	363	342	322	300	281	271	279	297	320	340	362	379	393	401		
65	358	351	336	319	296	274	250	229	218	227	247	271	294	317	335	352	360		
70	315	307	291	272	250	226	201	178	165	175	197	223	247	271	291	308	316		
75	271	262	247	227	204	179	152	127	111	124	148	175	201	225	246	262	272		
80	228	219	203	183	160	134	105	79.8	62.1	75.8	100	130	156	181	203	219	229		
85	190	180	165	145	121	95.5	66.7	40.3	22.1	36.1	62.5	91.6	118	143	165	181	191		
90	166	157	142	123	100	74.5	46.8	20.2	2.70	16.0	42.6	70.8	97.4	122	142	158	168		
95	157	149	135	117	95.3	70.7	44.1	18.6	2.66	14.0	40.0	67.1	92.6	116	135	150	160		
100	149	142	129	112	91.0	67.5	42.1	18.1	2.67	13.9	36.9	60.4	88.3	110	129	143	151		
105	141	134	122	106	86.7	64.5	40.5	17.9	2.45	13.8	35.3	57.1	73.7	105	122	135	143		
110	133	127	116	101	82.4	61.5	38.9	16.8	2.18	12.3	31.4	52.0	73.3	91.7	110	128	135		
115	125	119	109	95.3	78.0	58.5	37.3	16.0	2.21	10.3	28.4	46.5	63.4	84.0	92.1	120	126		
120	117	112	102	89.6	73.6	55.4	34.8	14.7	2.56	9.61	25.8	41.8	56.8	70.2	90.8	105	118		
125	109	104	95.4	83.7	68.9	52.2	32.2	13.6	2.90	9.33	23.5	37.6	51.2	63.5	76.4	86.1	109		
130	101	96.1	88.2	77.5	64.1	48.1	30.2	13.4	3.24	9.06	20.3	33.6	45.5	56.8	66.7	83.3	100		
135	91.8	87.8	80.5	71.2	58.8	43.4	27.6	13.0	3.56	8.82	17.9	30.1	40.1	50.0	58.6	68.6	78.3		
140	82.8	79.3	72.8	64.5	52.7	38.9	24.9	12.4	3.87	8.78	16.6	25.3	35.2	43.5	50.8	57.5	74.8		
145	73.4	70.4	64.8	57.2	46.7	34.6	22.5	11.8	4.15	8.90	16.0	23.1	29.9	37.3	43.4	49.5	61.0		
150	63.6	61.0	56.1	49.2	39.6	30.2	20.1	11.1	4.36	8.84	15.1	21.6	26.6	30.9	36.4	40.6	45.6		
155	52.9	50.6	45.9	40.5	33.6	25.7	17.6	9.67	4.61	8.59	14.0	19.5	24.1	26.8	28.2	33.5	35.4		
160	41.5	40.1	37.0	32.9	27.1	21.2	15.1	5.04	4.79	5.53	12.5	17.0	20.8	23.6	24.0	25.4	24.7		
165	31.1	30.4	28.1	25.0	21.1	17.0	12.5	5.00	4.95	4.89	10.9	14.2	17.1	19.4	20.1	19.7	19.0		
170	19.8	20.6	19.6	17.9	15.5	12.5	5.16	5.10	5.06	5.03	6.16	11.2	13.0	14.7	15.4	14.9	14.2		
175	9.60	10.8	8.11	5.66	5.28	5.18	5.15	5.17	5.20	5.12	5.20	5.16	5.83	9.14	10.3	10.3	9.45		
180	5.06	5.13	5.13	5.11	5.11	5.12	5.14	5.18	5.24	5.20	5.21	5.20	5.19	5.17	5.16	5.15	5.12		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2018-12-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.291  
Humidity:65.0%  
Test Distance:8.317m [K=1.0000]  
Remarks: