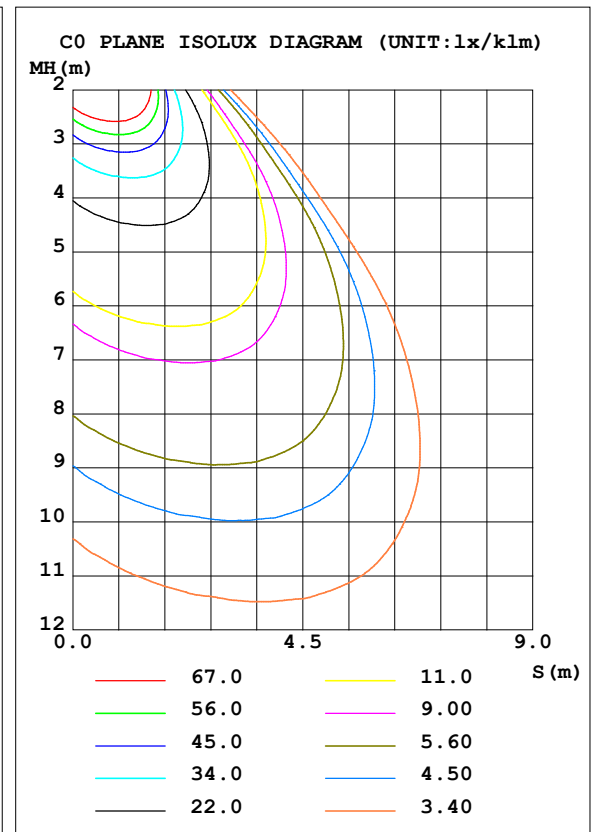
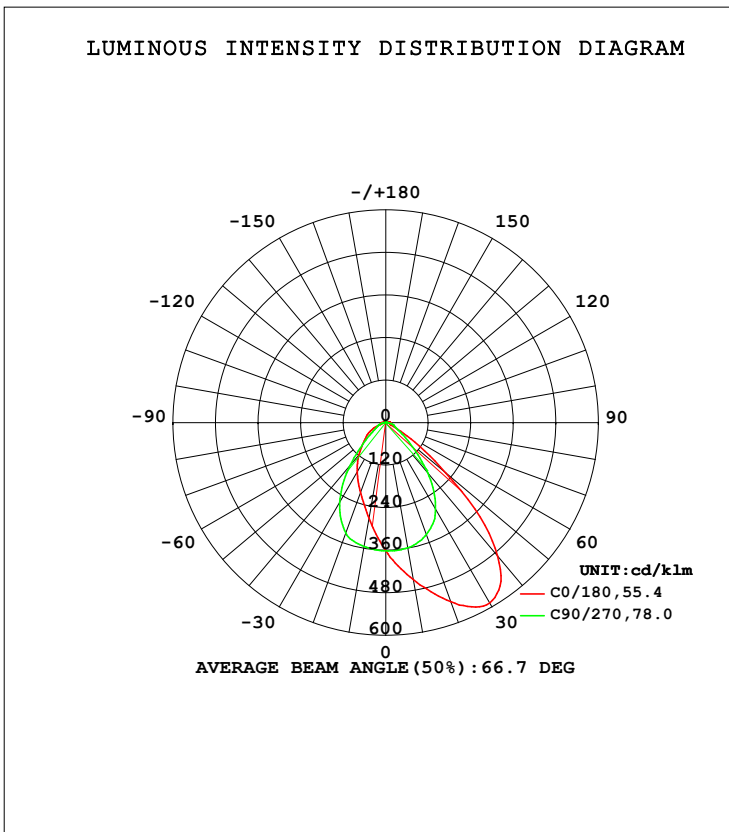


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	CFLS-1570-40RS-05WH	Imax (cd/klm)	662.4	S/MH (C0/180)	0.69
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.09
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	1.2, 52.7
NOMINAL FLUX (lm)	11550.1	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.2, 44.9
LAMPS INSIDE	1	η up (%)	2.4	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230.0	η down (%)	97.6	CIBSE SHR MAX	1.10



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Kaye
 Test Date: 2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 8.330m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

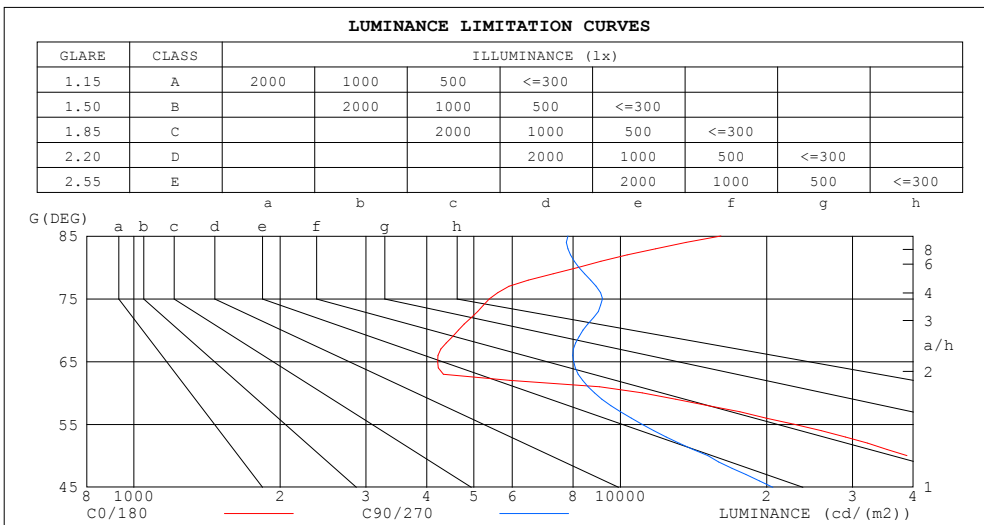
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	449.7	417.5	358.3	300.4	274.7	292.3	354.7	418.1	0- 10	34.30	34.30	3.43,3.43
20	536.9	473.2	335.6	235.3	209.1	225.3	331.1	471.2	10- 20	100.5	134.8	13.5,13.5
30	586.6	543.1	281.1	178.0	161.9	168.9	259.9	538.0	20- 30	160.3	295.0	29.5,29.5
40	491.0	628.7	184.2	128.1	117.4	120.9	155.3	620.4	30- 40	202.1	497.1	49.7,49.7
50	222.5	632.0	86.75	84.90	79.18	79.79	68.56	607.0	40- 50	201.5	698.6	69.9,69.9
60	49.43	104.7	39.45	61.11	52.89	56.32	33.68	75.00	50- 60	136.5	835.2	83.5,83.5
70	14.17	18.91	25.57	31.45	16.98	27.97	21.77	17.88	60- 70	91.71	926.9	92.7,92.7
80	12.70	16.23	12.73	9.423	14.31	8.748	9.613	14.77	70- 80	36.01	962.9	96.3,96.3
90	10.46	12.93	1.459	7.138	12.46	6.818	0.8743	13.03	80- 90	13.01	975.9	97.6,97.6
100	10.57	13.59	1.296	4.438	6.262	4.149	1.146	11.64	90-100	7.657	983.6	98.4,98.4
110	7.004	5.240	1.527	3.873	4.105	3.749	1.404	4.734	100-110	5.437	989.0	98.9,98.9
120	3.465	2.887	1.741	3.629	4.251	3.555	1.649	2.367	110-120	3.264	992.3	99.2,99.2
130	2.633	1.971	1.900	3.391	4.021	3.325	1.843	1.784	120-130	2.453	994.7	99.5,99.5
140	2.200	1.594	2.061	3.105	3.670	3.069	2.044	1.522	130-140	1.909	996.6	99.7,99.7
150	1.879	1.538	2.199	2.792	3.233	2.797	2.168	1.492	140-150	1.442	998.1	99.8,99.8
160	1.699	1.744	2.272	2.726	3.006	2.795	2.324	1.711	150-160	1.039	999.1	99.9,99.9
170	2.076	2.175	2.421	2.701	2.986	2.774	2.449	2.108	160-170	0.6671	999.8	100,100
180	2.620	2.571	2.537	2.512	2.631	2.581	2.539	2.512	170-180	0.2382	1000	100,100
DEG	LUMINOUS INTENSITY:cd/klm									UNIT:lm/klm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16097	7808
80	8203	8222
75	5388	9197
70	4646	8383
65	4212	8020
60	11085	8847
55	22757	11083
50	38814	15133
45	59894	20577

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding 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	.277	.158	.050	.270	.154	.049	.255	.146	.047	.242	.140	.045	.230	.133	.043	
2.0	.265	.145	.045	.258	.142	.044	.245	.136	.042	.234	.131	.041	.223	.126	.040	
3.0	.248	.132	.040	.242	.130	.039	.231	.125	.038	.221	.121	.037	.211	.117	.036	
4.0	.232	.121	.035	.227	.119	.035	.217	.115	.034	.207	.111	.034	.199	.108	.033	
5.0	.217	.110	.032	.212	.109	.032	.203	.106	.031	.195	.103	.031	.187	.100	.030	
6.0	.203	.102	.029	.198	.100	.029	.190	.098	.028	.183	.095	.028	.176	.093	.027	
7.0	.190	.094	.027	.186	.093	.026	.179	.090	.026	.172	.088	.026	.166	.086	.025	
8.0	.178	.087	.024	.175	.086	.024	.168	.084	.024	.162	.082	.024	.156	.080	.023	
9.0	.168	.081	.023	.165	.080	.023	.159	.079	.022	.153	.077	.022	.148	.075	.022	
10.0	.158	.076	.021	.156	.075	.021	.150	.074	.021	.145	.072	.021	.140	.071	.020	

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	.209	.209	.209	.178	.178	.178	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.197	.175	.155	.168	.150	.134	.115	.103	.093	.066	.060	.054	.021	.019	.017	
2.0	.187	.151	.120	.160	.130	.104	.110	.090	.072	.063	.052	.042	.020	.017	.014	
3.0	.179	.133	.096	.154	.115	.083	.105	.080	.058	.061	.047	.034	.020	.015	.011	
4.0	.171	.119	.080	.147	.103	.069	.101	.072	.049	.059	.042	.029	.019	.014	.009	
5.0	.164	.109	.068	.141	.094	.059	.097	.066	.042	.056	.039	.025	.018	.013	.008	
6.0	.157	.101	.060	.135	.087	.052	.093	.061	.037	.054	.036	.022	.017	.012	.007	
7.0	.151	.094	.053	.130	.081	.047	.090	.057	.033	.052	.034	.020	.017	.011	.006	
8.0	.145	.088	.049	.125	.076	.042	.086	.054	.030	.050	.032	.018	.016	.010	.006	
9.0	.139	.083	.045	.120	.072	.039	.083	.051	.028	.048	.030	.017	.016	.010	.006	
10.0	.134	.079	.042	.115	.068	.037	.080	.048	.026	.047	.028	.016	.015	.009	.005	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm										
NAME: LED Linear Lighting System					TYPE:			WEIGHT:4kg		
SPEC.:					DIM.: 1500*70*85mm			SERIAL No.:		
MFR.: CoreShine					SUR.:1500*70mm			Shielding 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	18.2	19.6	18.5	19.8	20.1	22.0	23.4	22.3	23.6	23.9
3H	18.0	19.3	18.3	19.5	19.8	23.3	24.6	23.6	24.8	25.1
4H	17.9	19.1	18.2	19.4	19.7	23.3	24.5	23.6	24.8	25.1
6H	17.8	19.0	18.2	19.3	19.6	23.2	24.4	23.6	24.7	25.0
8H	17.8	18.9	18.2	19.3	19.6	23.2	24.3	23.6	24.6	24.9
12H	17.9	18.9	18.2	19.2	19.6	23.1	24.2	23.5	24.5	24.9
4H 2H	18.8	20.0	19.2	20.3	20.6	22.1	23.3	22.5	23.6	23.9
3H	18.6	19.7	19.0	20.0	20.4	23.7	24.7	24.0	25.1	25.4
4H	18.6	19.5	19.0	19.9	20.3	23.8	24.8	24.2	25.1	25.5
6H	18.6	19.4	19.0	19.8	20.2	23.8	24.7	24.3	25.1	25.5
8H	18.6	19.4	19.0	19.8	20.2	23.8	24.6	24.3	25.0	25.4
12H	18.6	19.4	19.1	19.8	20.2	23.8	24.5	24.2	24.9	25.4
8H 4H	18.9	19.6	19.3	20.0	20.5	23.7	24.5	24.2	24.9	25.3
6H	18.9	19.5	19.3	20.0	20.4	23.8	24.4	24.3	24.9	25.4
8H	18.9	19.5	19.4	20.0	20.5	23.8	24.4	24.3	24.8	25.3
12H	19.1	19.5	19.6	20.0	20.6	23.8	24.3	24.3	24.8	25.3
12H 4H	18.9	19.6	19.3	20.0	20.5	23.7	24.4	24.1	24.8	25.3
6H	18.9	19.5	19.4	19.9	20.4	23.8	24.3	24.2	24.8	25.3
8H	19.0	19.5	19.5	20.0	20.5	23.8	24.3	24.3	24.7	25.3
Variations with the observer position at spacings:										
S = 1.0H	+ 1.9 / - 3.8					+ 1.0 / - 1.1				
1.5H	+ 2.0 / - 2.5					+ 2.8 / - 4.3				
2.0H	+ 3.2 / - 5.4					+ 4.0 / - 6.9				

CIE Pub.117, 11550 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.5)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

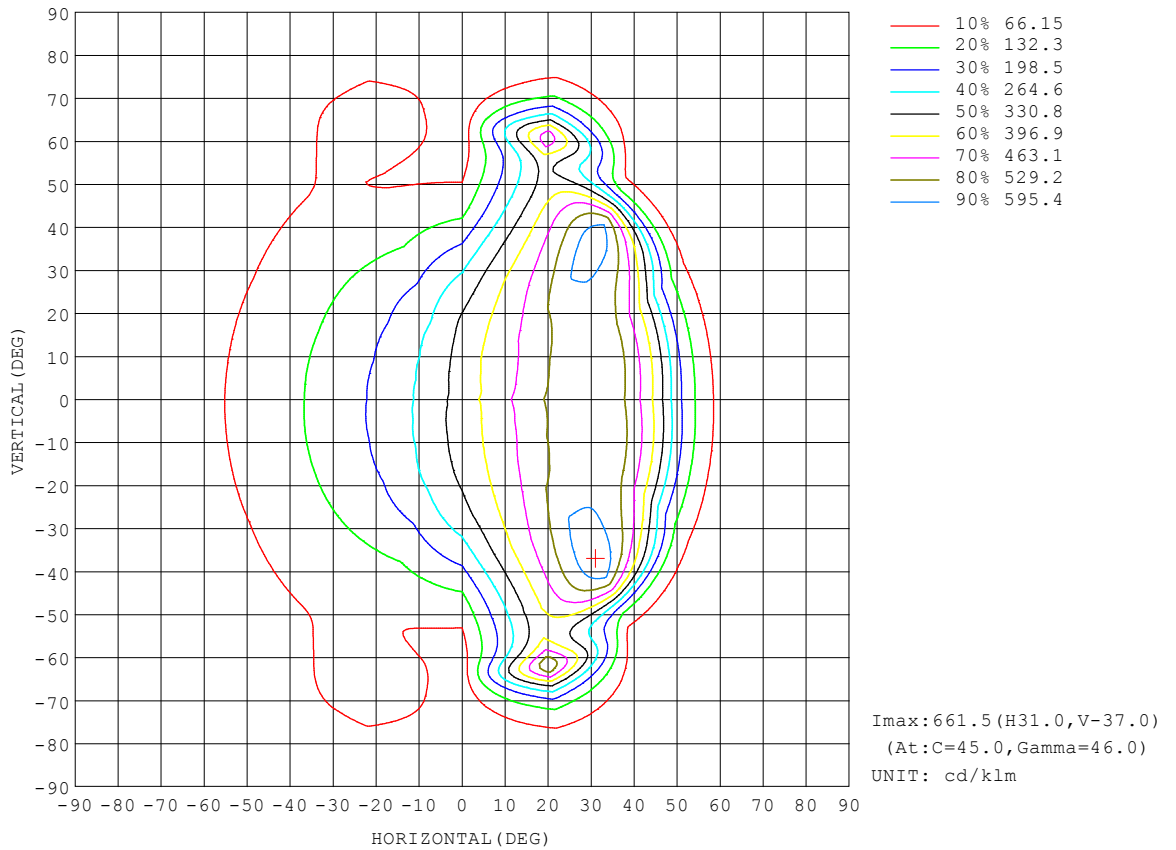
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	60	49	43	59	49	42	58	48	42	36
0.80	70	59	53	69	59	52	67	58	52	45
1.00	79	69	62	78	68	61	75	69	61	54
1.25	86	76	70	84	75	69	82	74	68	61
1.50	91	81	75	89	81	74	86	79	73	66
2.00	97	89	83	95	88	82	91	85	81	73
2.50	100	93	88	98	92	87	94	89	85	76
3.00	103	97	92	101	96	91	97	92	89	80
4.00	107	102	98	105	100	96	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

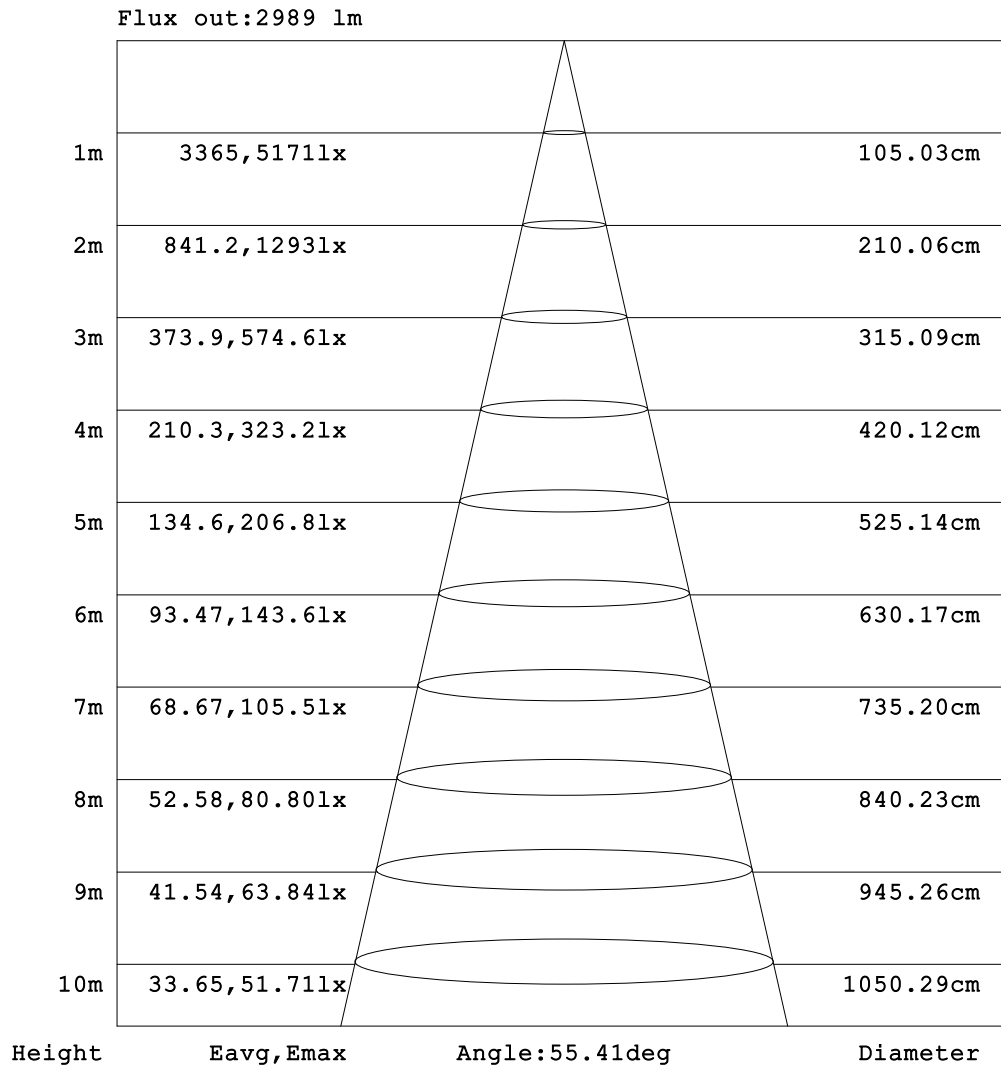


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

AAI Figure

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

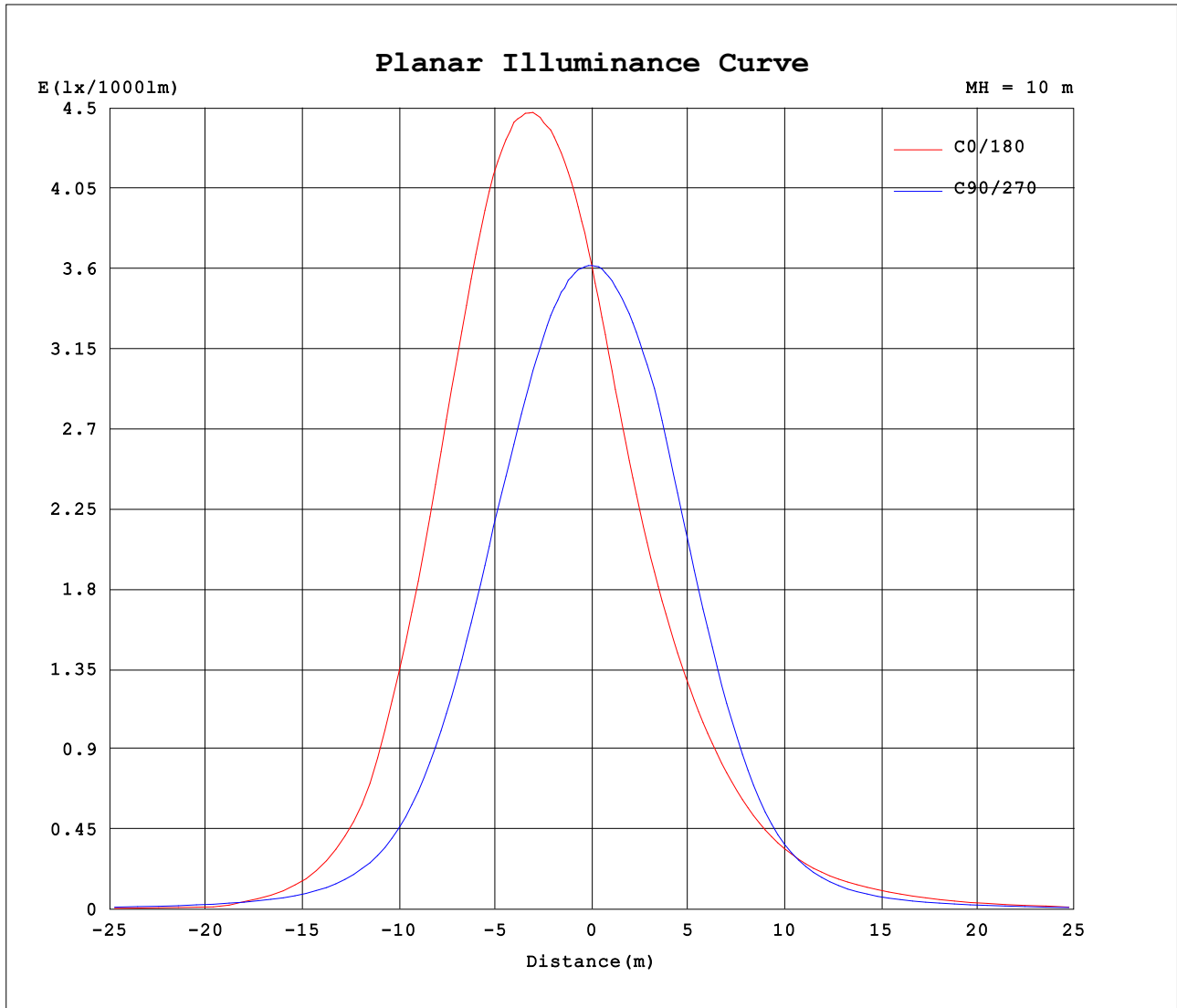


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Kaye
 Test Date: 2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 8.330m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:238.72V I:0.3030A P:70.762W PF:0.9784 Freq:50.03Hz Lamp Flux:11550.1x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

Table--1

UNIT: cd/klm

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	362	358	359	362	362	363	364	360	362	358	359	362	362	363	364	360			
5	406	399	390	377	362	346	332	320	316	317	326	343	360	379	392	398			
10	450	437	418	389	358	326	300	281	275	277	292	319	355	393	418	436			
15	494	477	445	399	350	304	267	247	239	241	258	292	347	400	443	473			
20	537	518	473	407	336	277	235	216	209	211	225	260	331	406	471	513			
25	573	557	506	412	315	243	206	191	185	185	196	226	300	408	502	551			
30	587	586	543	416	281	205	178	167	162	161	169	188	260	408	538	578			
35	562	586	585	419	237	167	152	144	140	139	144	151	211	396	579	573			
40	491	542	629	411	184	132	128	122	117	117	121	118	155	380	620	521			
45	378	443	660	396	130	102	104	101	96.9	96.0	97.9	90.3	104	361	650	411			
50	222	286	632	381	86.7	78.4	84.9	82.2	79.2	78.8	79.8	69.6	68.6	341	607	247			
55	116	141	394	379	56.7	69.3	72.1	66.7	66.7	64.2	68.5	67.1	46.2	338	324	118			
60	49.4	57.8	105	455	39.4	90.2	61.1	54.4	52.9	52.4	56.3	102	33.7	437	75.0	46.1			
65	15.9	17.4	27.3	545	30.2	123	44.3	40.0	38.4	38.0	39.9	123	26.6	429	25.2	16.5			
70	14.2	15.6	18.9	241	25.6	124	31.4	23.2	17.0	17.7	28.0	116	21.8	187	17.9	15.0			
75	12.4	14.1	18.4	101	21.2	87.9	14.4	14.1	15.0	13.8	11.9	67.5	16.4	78.8	17.4	13.3			
80	12.7	12.5	16.2	40.7	12.7	42.0	9.42	12.5	14.3	12.5	8.75	31.7	9.61	28.8	14.8	12.3			
85	12.5	13.0	13.8	14.1	6.07	16.2	7.81	12.7	13.4	12.3	7.52	11.5	4.12	10.1	12.9	12.5			
90	10.5	11.4	12.9	7.48	1.46	5.93	7.14	11.4	12.5	11.2	6.82	3.43	0.87	6.08	13.0	10.9			
95	9.13	10.6	13.7	5.43	1.21	2.35	5.43	8.41	9.19	8.00	4.96	2.21	1.04	4.34	13.3	10.4			
100	10.6	12.2	13.6	3.82	1.30	2.23	4.44	5.96	6.26	5.70	4.15	2.14	1.15	3.19	11.6	11.9			
105	10.4	11.6	8.70	2.98	1.40	2.22	3.98	4.81	4.84	4.60	3.79	2.11	1.27	2.49	7.42	9.91			
110	7.00	7.47	5.24	2.37	1.53	2.23	3.87	4.24	4.10	4.12	3.75	2.15	1.40	2.07	4.73	6.28			
115	4.37	4.64	3.91	2.03	1.60	2.19	3.79	4.18	4.01	4.11	3.66	2.12	1.53	1.83	3.30	4.09			
120	3.47	3.64	2.89	1.79	1.74	2.21	3.63	4.28	4.25	4.14	3.55	2.17	1.65	1.65	2.37	3.31			
125	2.94	2.93	2.42	1.62	1.84	2.28	3.54	4.03	4.09	3.93	3.46	2.25	1.76	1.56	1.98	2.75			
130	2.63	2.65	1.97	1.54	1.90	2.30	3.39	3.95	4.02	3.84	3.33	2.27	1.84	1.50	1.78	2.44			
135	2.40	2.32	1.73	1.52	1.97	2.30	3.26	3.77	3.85	3.67	3.22	2.26	1.93	1.50	1.62	2.04			
140	2.20	1.92	1.59	1.55	2.06	2.30	3.10	3.60	3.67	3.53	3.07	2.30	2.04	1.46	1.52	1.66			
145	2.04	1.72	1.53	1.62	2.13	2.38	2.93	3.40	3.48	3.34	2.91	2.42	2.18	1.52	1.49	1.59			
150	1.88	1.65	1.54	1.63	2.20	2.48	2.79	3.17	3.23	3.11	2.80	2.53	2.17	1.64	1.49	1.55			
155	1.76	1.66	1.60	1.78	2.26	2.57	2.71	2.96	3.08	2.94	2.74	2.61	2.24	1.79	1.56	1.57			
160	1.70	1.71	1.74	1.95	2.27	2.60	2.73	2.82	3.01	2.85	2.79	2.62	2.32	1.96	1.71	1.63			
165	1.82	1.90	1.95	2.11	2.34	2.61	2.75	2.80	3.02	2.88	2.80	2.63	2.40	2.10	1.91	1.81			
170	2.08	2.13	2.17	2.25	2.42	2.60	2.70	2.77	2.99	2.87	2.77	2.62	2.45	2.26	2.11	2.04			
175	2.35	2.36	2.38	2.40	2.49	2.58	2.62	2.67	2.85	2.78	2.70	2.60	2.50	2.40	2.31	2.27			
180	2.62	2.60	2.57	2.55	2.54	2.53	2.51	2.50	2.63	2.60	2.58	2.54	2.54	2.53	2.51	2.50			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.330m [K=1.0000]
 Remarks: