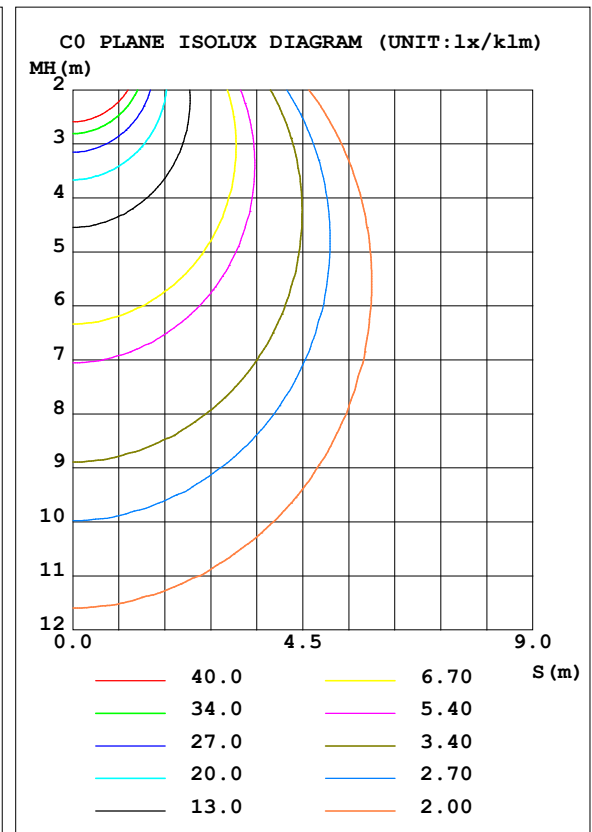
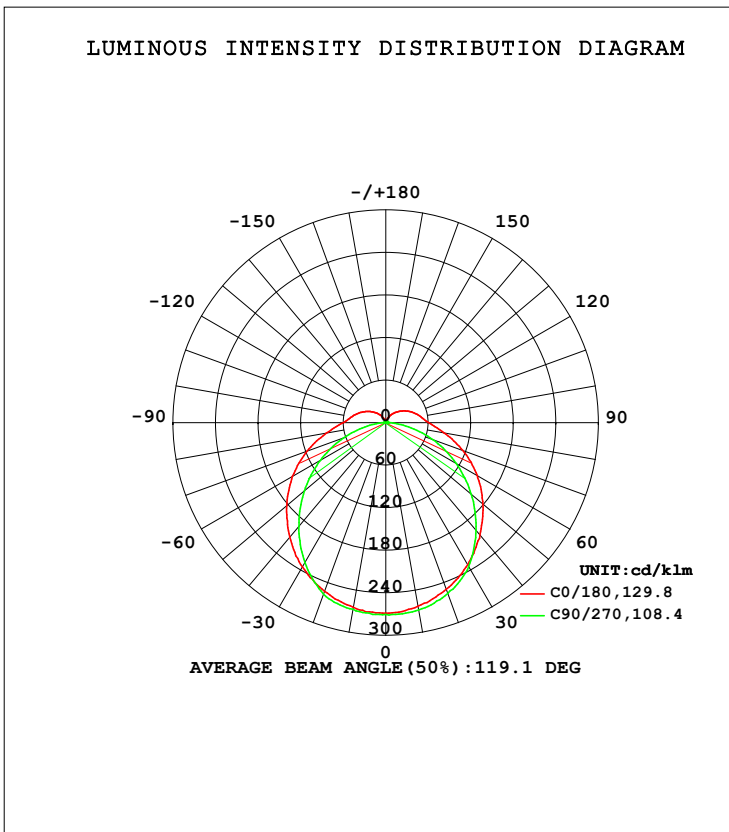


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 141.37 lm/W			
MODEL	CFLS-1570-40FF-05WH	Imax (cd/klm)	272.0	S/MH (C0/180)	1.30
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	6.0, 44.8
NOMINAL FLUX (lm)	10032.8	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	5.7, 43.6
LAMPS INSIDE	1	η up (%)	11.6	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230.0	η down (%)	88.4	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Kaye
 Test Date: 2017-11-13

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:

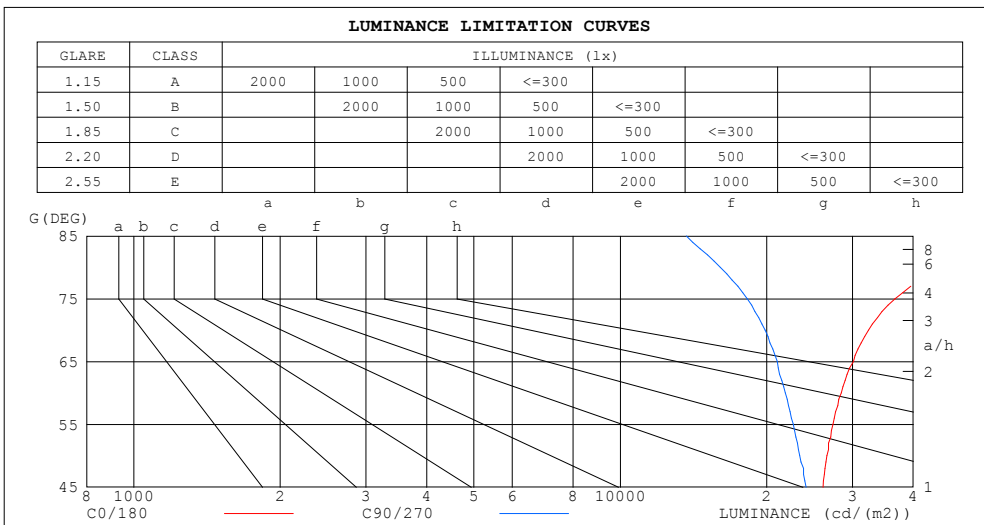
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	262.9	261.2	268.4	268.7	264.7	264.1	267.2	262.6	0- 10	25.47	25.47	2.55,2.55
20	250.1	247.2	256.1	256.8	253.0	252.7	257.2	246.5	10- 20	73.24	98.70	9.87,9.87
30	231.4	228.0	233.9	238.8	235.4	235.3	228.2	226.6	20- 30	112.0	210.7	21.1,21.1
40	206.7	203.9	198.2	213.8	210.6	210.5	190.8	201.0	30- 40	136.9	347.6	34.8,34.8
50	178.9	175.5	157.4	180.1	182.4	178.3	149.8	171.1	40- 50	145.1	492.8	49.3,49.3
60	149.0	143.2	114.2	144.0	152.1	141.6	106.6	135.9	50- 60	137.5	630.3	63,63
70	115.9	106.2	71.03	106.4	118.2	103.8	63.06	99.06	60- 70	116.0	746.3	74.6,74.6
80	83.54	70.11	29.20	70.26	84.80	67.20	23.29	63.68	70- 80	84.51	830.8	83.1,83.1
90	60.52	44.61	3.096	43.72	60.17	42.60	2.146	41.33	80- 90	52.77	883.6	88.4,88.4
100	50.14	36.10	2.749	34.65	48.95	34.25	2.186	32.77	90-100	36.86	920.4	92,92
110	41.78	28.37	2.714	27.66	40.47	27.32	2.217	26.44	100-110	29.06	949.5	94.9,94.9
120	33.28	20.36	2.621	20.89	31.89	20.71	2.213	15.55	110-120	21.35	970.8	97.1,97.1
130	25.03	12.59	2.496	15.09	23.70	14.95	2.170	10.54	120-130	14.20	985.0	98.5,98.5
140	17.62	7.511	2.341	9.357	16.36	9.283	2.086	6.426	130-140	8.475	993.5	99.4,99.4
150	10.31	3.867	2.157	4.494	9.147	4.392	1.737	3.497	140-150	4.142	997.7	99.8,99.8
160	4.135	2.104	1.616	2.201	3.350	2.096	1.696	2.094	150-160	1.611	999.3	99.9,99.9
170	1.811	1.723	1.665	1.759	1.860	1.726	1.689	1.775	160-170	0.5632	999.8	100,100
180	1.813	1.806	1.718	1.815	1.823	1.810	1.719	1.816	170-180	0.1683	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:2017-11-13

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:

LUMINANCE LIMITATION CURVES

Test:U:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	76868	13671
80	45970	16067
75	36725	18243
70	32372	19843
65	30155	21010
60	28471	21832
55	27387	22680
50	26589	23390
45	26096	24094

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-13

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:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	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	.355	.202	.064	.344	.196	.062	.324	.186	.059	.306	.176	.057	.289	.167	.054	
2.0	.316	.173	.053	.307	.169	.052	.289	.161	.050	.272	.153	.048	.257	.145	.046	
3.0	.285	.152	.045	.277	.148	.045	.260	.141	.043	.245	.134	.041	.231	.128	.040	
4.0	.259	.135	.040	.251	.132	.039	.237	.126	.038	.223	.120	.036	.211	.114	.035	
5.0	.237	.121	.035	.230	.118	.034	.217	.113	.033	.205	.108	.032	.193	.103	.031	
6.0	.218	.109	.031	.212	.107	.031	.200	.102	.030	.189	.098	.029	.178	.094	.028	
7.0	.202	.100	.028	.196	.098	.028	.185	.094	.027	.175	.090	.026	.166	.086	.025	
8.0	.188	.092	.026	.183	.090	.025	.173	.086	.025	.163	.083	.024	.154	.079	.023	
9.0	.175	.085	.024	.171	.083	.023	.162	.080	.023	.153	.077	.022	.145	.074	.021	
10.0	.165	.079	.022	.160	.077	.022	.152	.074	.021	.144	.071	.020	.136	.069	.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																
1.0	.279	.279	.279	.239	.239	.239	.163	.163	.163	.094	.094	.094	.030	.030	.030	
2.0	.266	.222	.185	.227	.191	.160	.156	.132	.112	.090	.077	.065	.029	.025	.021	
3.0	.258	.205	.163	.221	.177	.141	.152	.123	.099	.088	.072	.058	.028	.023	.019	
4.0	.250	.192	.148	.215	.166	.128	.148	.116	.090	.085	.068	.053	.027	.022	.018	
5.0	.243	.182	.137	.208	.158	.120	.144	.110	.084	.083	.065	.050	.027	.021	.017	
6.0	.235	.174	.130	.202	.151	.113	.140	.105	.080	.081	.062	.048	.026	.020	.016	
7.0	.228	.167	.124	.196	.145	.108	.136	.102	.077	.079	.060	.046	.025	.020	.015	
8.0	.222	.162	.120	.191	.140	.105	.132	.098	.074	.077	.058	.044	.025	.019	.015	
9.0	.216	.157	.117	.186	.136	.102	.129	.096	.073	.075	.056	.043	.024	.019	.014	
10.0	.210	.153	.115	.181	.133	.100	.125	.093	.071	.073	.055	.042	.024	.018	.014	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-13

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:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm										
NAME: LED Linear Lighting System					TYPE:			WEIGHT:4kg		
SPEC.:					DIM.: 1500*70*85			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	15.9	17.3	16.3	17.7	18.1	15.0	16.4	15.4	16.8	17.3
3H	18.0	19.4	18.5	19.8	20.3	16.5	17.8	17.0	18.3	18.7
4H	19.2	20.4	19.7	20.9	21.4	17.1	18.4	17.6	18.8	19.3
6H	20.4	21.5	20.9	22.0	22.5	17.5	18.7	18.0	19.2	19.7
8H	21.0	22.1	21.5	22.6	23.2	17.7	18.8	18.2	19.3	19.8
12H	21.7	22.8	22.3	23.3	23.9	17.8	18.8	18.3	19.3	19.9
4H 2H	16.5	17.8	17.0	18.2	18.7	15.9	17.1	16.4	17.6	18.1
3H	18.9	20.0	19.4	20.5	21.1	17.6	18.7	18.2	19.2	19.8
4H	20.2	21.2	20.8	21.7	22.3	18.4	19.4	19.0	19.9	20.5
6H	21.6	22.5	22.2	23.0	23.7	19.0	19.9	19.6	20.5	21.1
8H	22.4	23.2	22.9	23.7	24.4	19.2	20.1	19.8	20.6	21.3
12H	23.2	24.0	23.8	24.6	25.2	19.4	20.2	20.0	20.7	21.4
8H 4H	20.6	21.4	21.2	22.0	22.6	19.1	19.9	19.7	20.5	21.1
6H	22.2	22.9	22.8	23.5	24.2	20.0	20.7	20.6	21.3	22.0
8H	23.2	23.8	23.8	24.4	25.1	20.4	21.0	21.0	21.6	22.3
12H	24.3	24.8	24.9	25.5	26.2	20.7	21.2	21.3	21.9	22.6
12H 4H	20.6	21.4	21.2	22.0	22.6	19.3	20.0	19.9	20.6	21.3
6H	22.4	23.0	23.0	23.6	24.3	20.3	21.0	21.0	21.6	22.3
8H	23.4	23.9	24.0	24.6	25.3	20.8	21.4	21.5	22.0	22.7
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, 10033 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.0)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-13

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:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

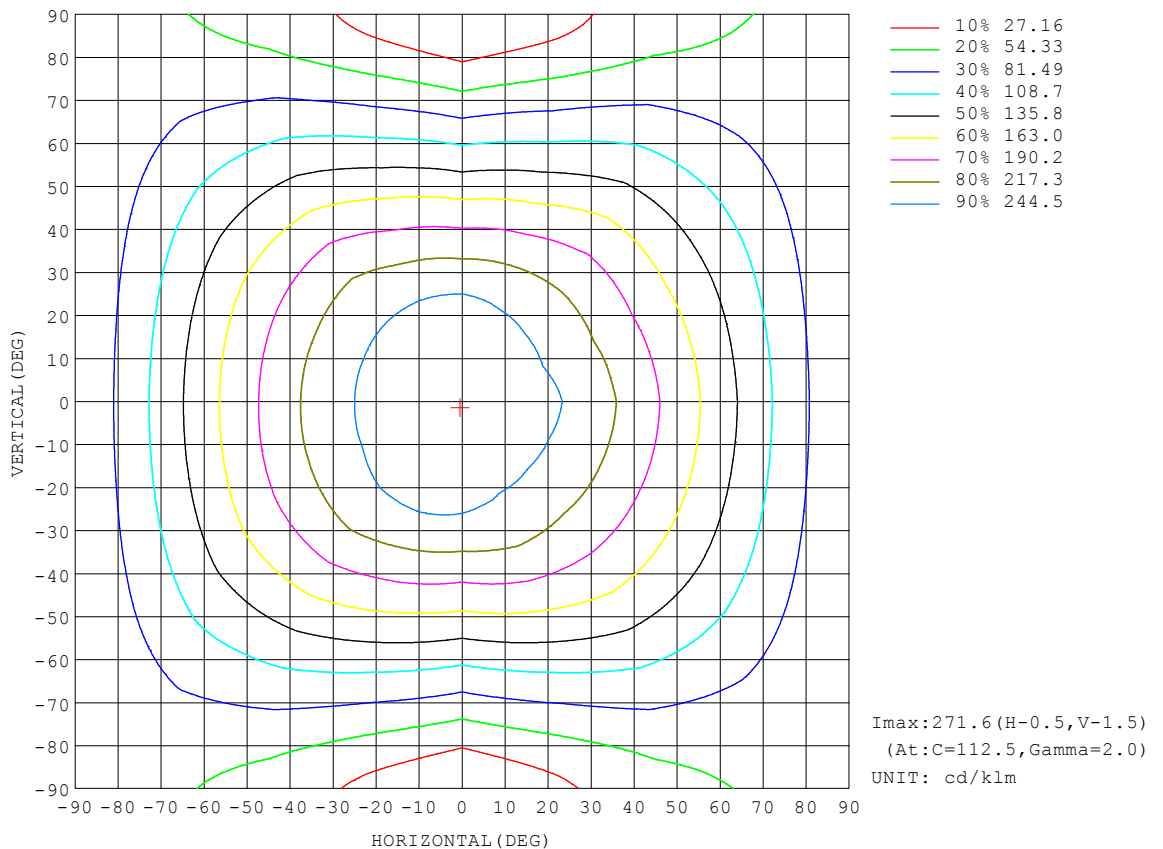
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	39	32	50	39	32	49	38	32	25
0.80	61	48	41	60	48	40	57	47	40	32
1.00	69	57	49	67	56	48	64	57	47	39
1.25	76	64	56	74	63	55	70	61	54	45
1.50	81	70	62	79	68	61	74	66	59	50
2.00	88	78	70	85	76	69	81	73	67	57
2.50	92	83	76	89	81	74	84	77	71	60
3.00	96	88	81	93	85	79	87	81	76	64
4.00	100	93	87	97	91	85	91	86	81	69
5.00	103	97	92	100	94	89	93	89	85	72
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:2017-11-13

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:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

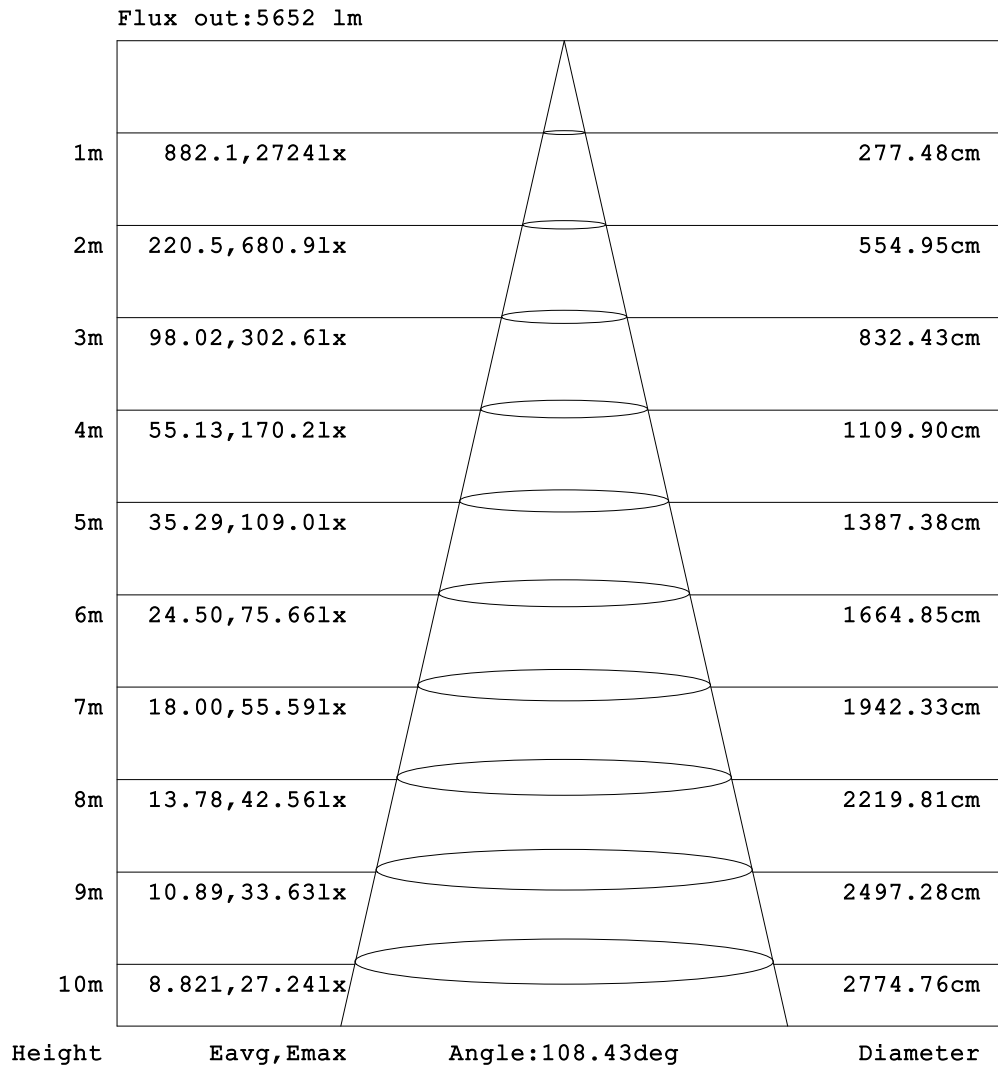


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-13

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:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

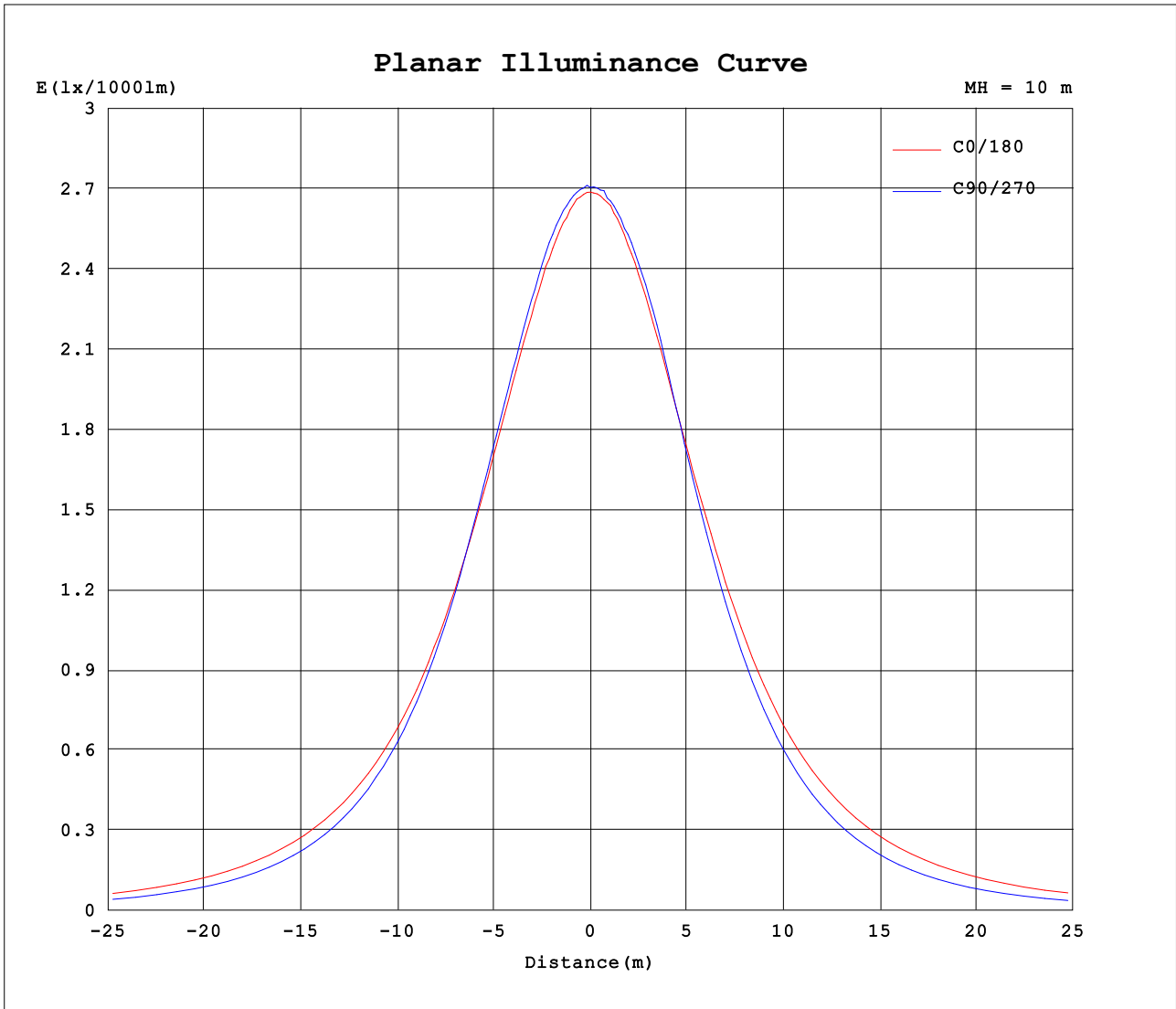


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-13

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: 2017-11-13

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:235.85V I:0.3069A P:70.967W PF:0.9803 Freq:49.98Hz Lamp Flux:10032.8x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85	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	269	267	268	269	271	271	270	266	269	267	268	269	271	271	270	266			
5	267	265	266	268	270	271	271	266	268	266	268	269	270	270	267	264			
10	263	261	261	264	268	269	269	263	265	263	264	267	267	267	263	259			
15	257	255	255	258	264	266	263	259	260	258	259	262	264	260	255	253			
20	250	248	247	250	256	261	257	253	253	252	253	254	257	251	246	245			
25	242	239	238	240	247	251	248	245	244	244	245	245	244	241	237	236			
30	231	230	228	231	234	237	239	236	235	234	235	232	228	228	227	225			
35	219	217	217	219	217	222	228	225	224	223	223	215	210	211	214	213			
40	207	205	204	205	198	205	214	212	211	210	211	198	191	194	201	200			
45	193	191	190	187	178	186	197	198	196	196	195	180	171	176	187	186			
50	179	177	176	168	157	167	180	184	182	181	178	161	150	157	171	172			
55	164	162	160	148	136	148	162	169	167	166	160	141	129	138	154	157			
60	149	147	143	128	114	128	144	153	152	150	142	121	107	117	136	141			
65	133	131	125	108	92.9	108	125	136	135	133	123	101	84.7	97.8	118	125			
70	116	114	106	87.4	71.0	87.4	106	118	118	115	104	81.7	63.1	77.9	99.1	108			
75	99.5	96.8	88.3	67.7	49.4	67.5	88.3	101	101	98.2	85.0	62.4	42.2	58.9	80.7	92.0			
80	83.5	80.5	70.1	49.0	29.2	48.6	70.3	83.9	84.8	81.3	67.2	44.2	23.3	41.1	63.7	76.1			
85	70.1	66.5	54.8	32.9	12.5	32.3	54.5	68.9	70.6	67.0	52.3	28.9	8.17	26.7	49.8	63.1			
90	60.5	56.7	44.6	22.7	3.10	21.6	43.7	58.0	60.2	56.7	42.6	20.4	2.15	19.3	41.3	54.2			
95	54.4	50.8	39.5	19.1	2.76	18.0	38.2	51.1	53.5	50.5	37.7	17.4	2.15	16.7	36.6	48.8			
100	50.1	46.6	36.1	16.6	2.75	15.4	34.7	46.7	49.0	46.2	34.3	14.9	2.19	14.2	32.8	44.5			
105	46.0	42.7	32.7	14.2	2.73	13.1	31.2	42.5	44.7	42.1	30.8	12.7	2.22	11.7	30.2	40.2			
110	41.8	38.6	28.4	11.6	2.71	11.1	27.7	38.3	40.5	37.8	27.3	10.9	2.22	9.64	26.4	36.1			
115	37.5	34.5	25.0	9.44	2.67	9.45	24.2	34.1	36.2	33.6	23.9	9.25	2.22	7.90	21.8	32.0			
120	33.3	30.4	20.4	7.78	2.62	7.81	20.9	29.8	31.9	29.3	20.7	7.62	2.21	6.28	15.6	28.4			
125	29.0	26.3	16.1	6.24	2.56	6.27	17.9	25.8	27.7	25.3	17.8	6.10	2.20	5.06	13.0	24.8			
130	25.0	22.4	12.6	4.97	2.50	4.89	15.1	22.0	23.7	21.5	15.0	4.73	2.17	3.97	10.5	20.7			
135	21.3	18.9	9.92	3.89	2.42	3.74	12.2	18.4	20.0	18.0	12.1	3.58	2.13	3.14	8.30	16.5			
140	17.6	13.7	7.51	3.15	2.34	2.92	9.36	14.8	16.4	14.4	9.28	2.74	2.09	2.44	6.43	10.4			
145	13.9	9.67	5.44	2.67	2.25	2.45	6.72	11.3	12.7	10.9	6.63	2.28	2.03	1.82	4.78	8.06			
150	10.3	6.73	3.87	1.78	2.16	2.24	4.49	8.02	9.15	7.67	4.39	2.11	1.74	1.71	3.50	5.86			
155	6.89	4.64	2.73	1.57	2.06	2.09	2.89	5.10	5.92	4.81	2.82	1.97	1.62	1.62	2.59	4.17			
160	4.13	3.01	2.10	1.59	1.62	1.92	2.20	2.94	3.35	2.79	2.10	1.63	1.70	1.69	2.09	2.75			
165	2.57	2.15	1.76	1.64	1.62	1.87	1.92	2.02	2.11	1.99	1.85	1.63	1.74	1.74	1.76	2.09			
170	1.81	1.79	1.72	1.67	1.67	1.77	1.76	1.82	1.86	1.83	1.73	1.67	1.69	1.77	1.78	1.80			
175	1.80	1.82	1.79	1.70	1.69	1.75	1.79	1.79	1.80	1.79	1.79	1.70	1.70	1.80	1.81	1.82			
180	1.81	1.83	1.81	1.72	1.72	1.81	1.81	1.83	1.82	1.82	1.81	1.72	1.72	1.80	1.82	1.83			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-13

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: