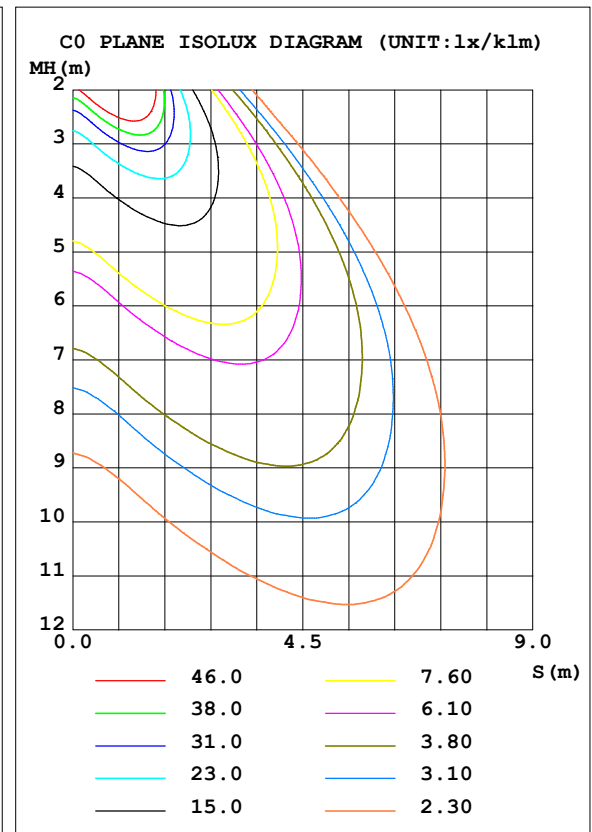
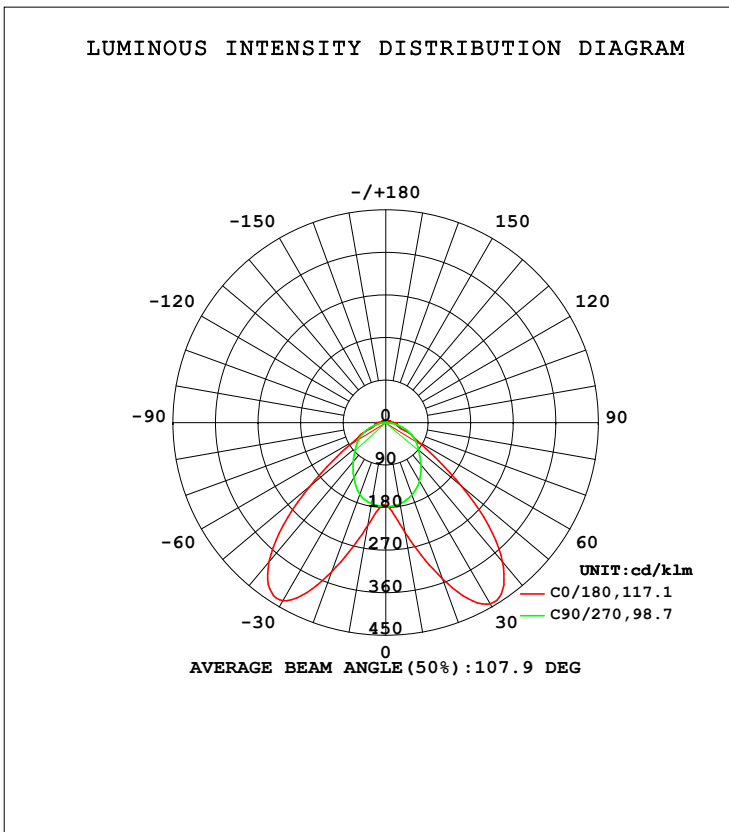


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 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 Eff: 159.28 lm/W			
MODEL	CFLS-1570-40DS-05WH	I _{max} (cd/klm)	443.5	S/MH (C0/180)	1.78
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.15
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	1.8, 49.5
NOMINAL FLUX (lm)	11258.9	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.7, 47.0
LAMPS INSIDE	1	η up (%)	3.5	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	230.0	η down (%)	96.5	CIBSE SHR MAX	0.90



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Kaye
 Test Date: 2017-11-10

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:

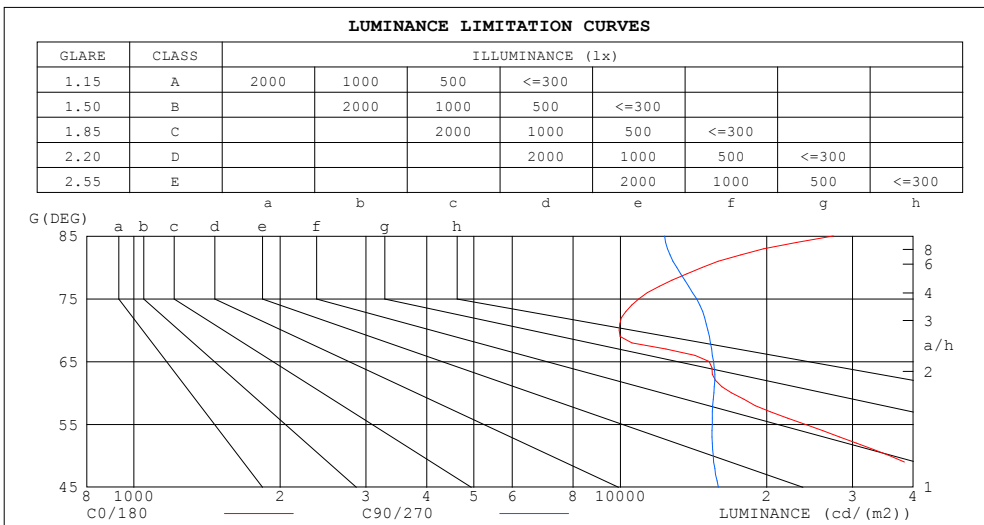
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	235.7	205.2	174.9	196.5	220.8	195.7	174.1	209.0	0- 10	18.01	18.01	1.8,1.8
20	351.9	271.6	162.4	260.7	335.8	260.5	161.7	275.1	10- 20	65.79	83.80	8.38,8.38
30	442.5	356.0	142.7	350.6	434.6	346.8	135.2	353.8	20- 30	136.3	220.1	22,22
40	384.1	389.3	116.0	398.9	384.3	383.2	107.2	375.8	30- 40	204.4	424.5	42.4,42.4
50	210.1	319.5	91.30	324.9	210.9	304.5	83.67	299.5	40- 50	217.6	642.1	64.2,64.2
60	77.38	194.8	71.27	196.3	75.88	177.5	63.61	176.7	50- 60	162.2	804.3	80.4,80.4
70	31.13	84.56	47.36	85.25	31.25	75.40	39.67	74.64	60- 70	94.48	898.7	89.9,89.9
80	23.42	32.21	20.74	31.66	23.21	28.43	15.79	28.64	70- 80	44.91	943.7	94.4,94.4
90	20.91	19.69	1.811	19.86	20.63	17.52	1.088	16.90	80- 90	21.21	964.9	96.5,96.5
100	8.677	9.785	1.304	9.507	8.309	8.855	1.219	8.661	90-100	10.72	975.6	97.6,97.6
110	8.007	9.398	1.522	9.075	7.581	8.498	1.425	8.382	100-110	6.973	982.6	98.3,98.3
120	7.905	6.426	1.672	6.948	7.726	6.655	1.551	5.272	110-120	6.233	988.8	98.9,98.9
130	6.260	4.420	1.765	5.574	5.946	5.373	1.692	4.003	120-130	4.401	993.2	99.3,99.3
140	5.566	3.287	1.855	4.300	5.309	4.190	1.817	3.062	130-140	3.090	996.3	99.6,99.6
150	4.102	2.367	1.864	2.683	3.956	2.638	1.861	2.289	140-150	1.936	998.2	99.8,99.8
160	2.356	1.870	1.803	1.783	2.343	1.828	1.848	1.919	150-160	1.059	999.3	99.9,99.9
170	2.012	1.954	1.880	1.891	2.048	1.921	1.901	1.978	160-170	0.5431	999.8	100,100
180	2.093	1.978	1.938	1.966	2.101	1.982	1.942	1.969	170-180	0.1875	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:2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 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	27400	12343
80	14745	13056
75	10920	14351
70	9949	15138
65	15225	15564
60	16917	15581
55	23960	15453
50	35729	15525
45	47629	15912

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 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	.300	.171	.054	.292	.167	.053	.277	.159	.051	.263	.152	.049	.250	.145	.047	
2.0	.283	.155	.048	.276	.152	.047	.263	.146	.045	.250	.140	.044	.239	.135	.043	
3.0	.264	.141	.042	.258	.138	.042	.246	.133	.041	.235	.129	.039	.225	.124	.038	
4.0	.246	.128	.038	.240	.126	.037	.230	.122	.036	.220	.118	.036	.210	.114	.035	
5.0	.229	.117	.034	.224	.115	.033	.214	.112	.033	.205	.108	.032	.197	.105	.032	
6.0	.213	.107	.031	.209	.105	.030	.200	.103	.030	.192	.100	.029	.185	.097	.029	
7.0	.199	.099	.028	.195	.097	.028	.188	.095	.027	.180	.092	.027	.173	.090	.026	
8.0	.187	.091	.026	.183	.090	.025	.176	.088	.025	.170	.086	.025	.163	.084	.024	
9.0	.176	.085	.024	.172	.084	.024	.166	.082	.023	.160	.080	.023	.154	.078	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.151	.075	.021	.146	.073	.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	.217	.217	.217	.186	.186	.186	.127	.127	.127	.073	.073	.073	.023	.023	.023	
1.0	.207	.183	.162	.177	.157	.140	.121	.108	.096	.070	.063	.056	.022	.020	.018	
2.0	.198	.159	.126	.170	.137	.109	.116	.095	.076	.067	.055	.045	.022	.018	.015	
3.0	.191	.142	.102	.164	.122	.089	.112	.085	.062	.065	.050	.037	.021	.016	.012	
4.0	.183	.128	.086	.157	.111	.075	.108	.077	.053	.063	.045	.031	.020	.015	.010	
5.0	.177	.118	.075	.152	.102	.065	.104	.071	.046	.060	.042	.027	.019	.014	.009	
6.0	.170	.110	.067	.146	.095	.058	.101	.067	.041	.058	.039	.024	.019	.013	.008	
7.0	.163	.103	.061	.141	.089	.053	.097	.063	.038	.056	.037	.022	.018	.012	.007	
8.0	.157	.097	.056	.135	.084	.049	.094	.059	.035	.054	.035	.021	.018	.011	.007	
9.0	.151	.093	.053	.130	.080	.046	.090	.056	.033	.053	.033	.020	.017	.011	.006	
10.0	.146	.088	.050	.126	.077	.044	.087	.054	.031	.051	.032	.019	.016	.010	.006	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 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	16.6	18.1	16.9	18.4	18.6	17.0	18.5	17.3	18.8	19.0
3H	16.8	18.1	17.1	18.4	18.7	18.0	19.3	18.3	19.6	19.9
4H	16.8	18.1	17.2	18.4	18.8	18.2	19.5	18.6	19.8	20.2
6H	17.0	18.2	17.4	18.5	18.9	18.4	19.6	18.8	19.9	20.3
8H	17.1	18.3	17.5	18.6	19.0	18.4	19.6	18.8	19.9	20.3
12H	17.3	18.4	17.7	18.8	19.2	18.5	19.6	18.9	19.9	20.3
4H 2H	17.3	18.6	17.7	18.9	19.2	17.7	18.9	18.0	19.3	19.6
3H	17.6	18.8	18.0	19.1	19.5	18.9	20.0	19.3	20.4	20.8
4H	17.8	18.8	18.2	19.2	19.6	19.4	20.4	19.8	20.8	21.2
6H	18.0	18.9	18.4	19.3	19.7	19.7	20.6	20.2	21.0	21.5
8H	18.2	19.0	18.6	19.4	19.9	19.8	20.6	20.3	21.1	21.5
12H	18.5	19.2	19.0	19.7	20.2	19.8	20.6	20.3	21.1	21.5
8H 4H	18.0	18.9	18.5	19.3	19.8	19.5	20.3	20.0	20.8	21.2
6H	18.4	19.1	18.9	19.6	20.1	20.0	20.7	20.5	21.2	21.7
8H	18.7	19.3	19.2	19.8	20.3	20.2	20.8	20.7	21.3	21.8
12H	19.2	19.7	19.7	20.2	20.7	20.3	20.9	20.9	21.4	21.9
12H 4H	18.1	18.8	18.6	19.3	19.8	19.5	20.2	20.0	20.7	21.2
6H	18.5	19.1	19.0	19.6	20.1	20.0	20.6	20.6	21.1	21.7
8H	18.9	19.4	19.4	19.9	20.5	20.3	20.8	20.8	21.3	21.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.8					+ 0.4 / - 0.4				
1.5H	+ 0.4 / - 0.7					+ 0.9 / - 1.6				
2.0H	+ 1.1 / - 1.7					+ 0.9 / - 2.6				

CIE Pub.117, 11259 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.4)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

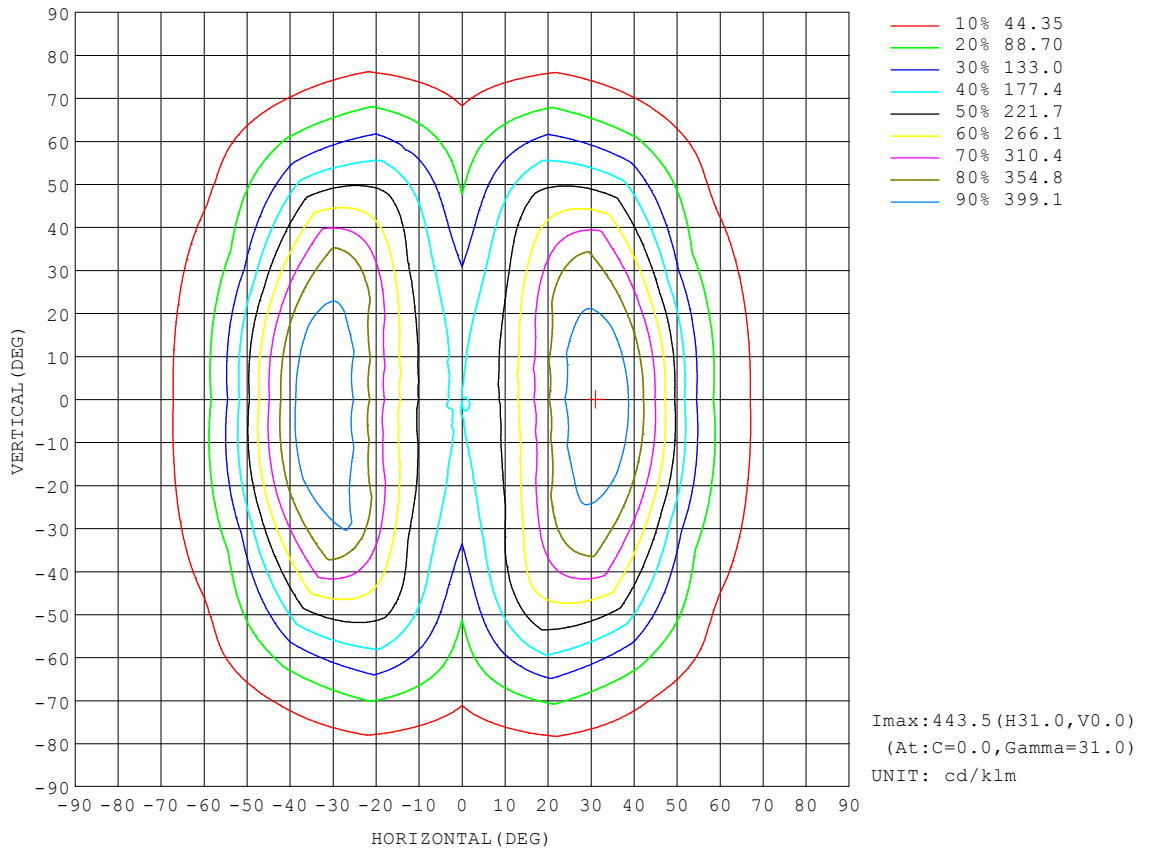
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	36	53	43	36	30
0.80	66	54	47	65	54	47	63	53	46	39
1.00	75	64	57	74	63	57	71	65	56	49
1.25	83	72	65	81	71	65	78	70	64	56
1.50	88	78	71	86	77	70	83	75	69	61
2.00	95	86	80	93	85	79	89	82	77	69
2.50	98	91	85	96	89	84	92	86	81	73
3.00	102	95	89	99	93	88	95	90	85	76
4.00	105	100	95	103	98	93	98	94	90	81
5.00	108	103	99	105	101	97	100	96	93	83
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:2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

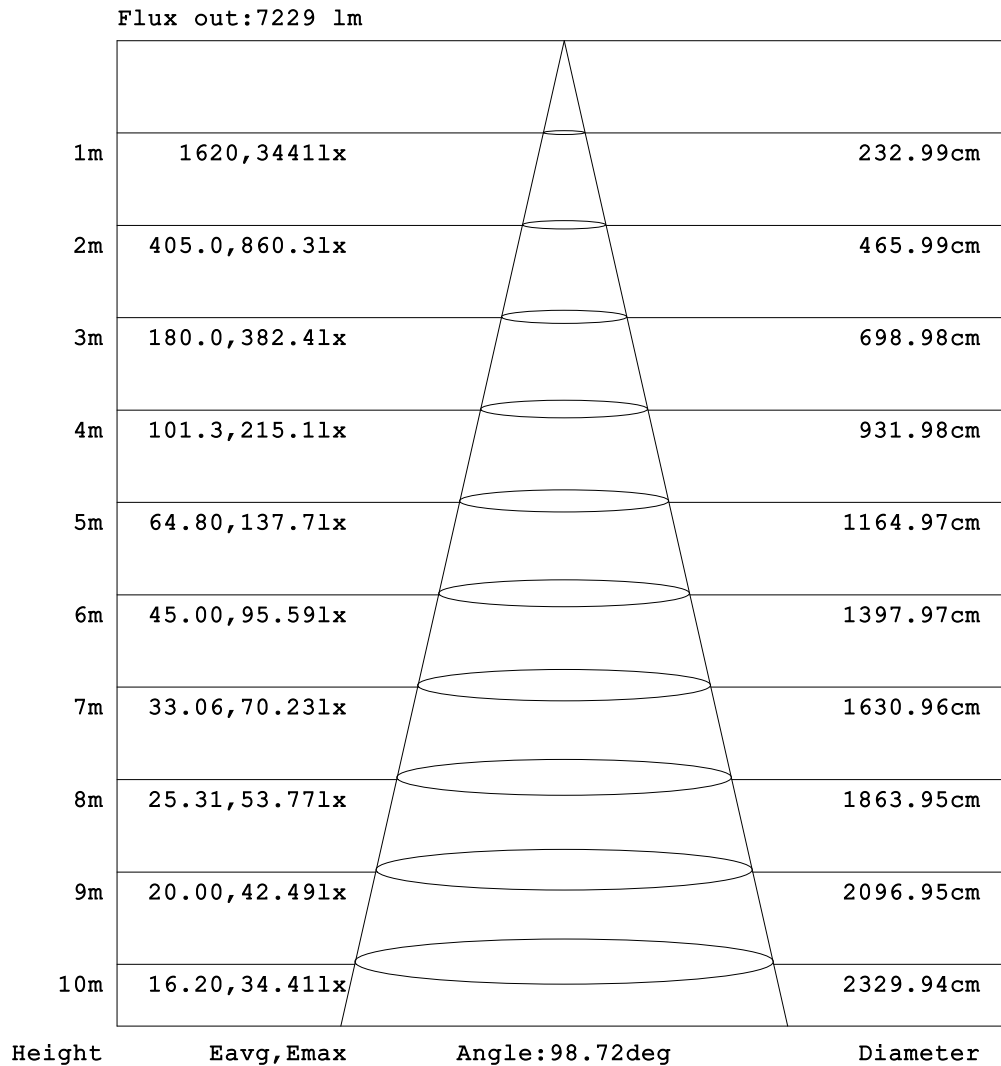


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

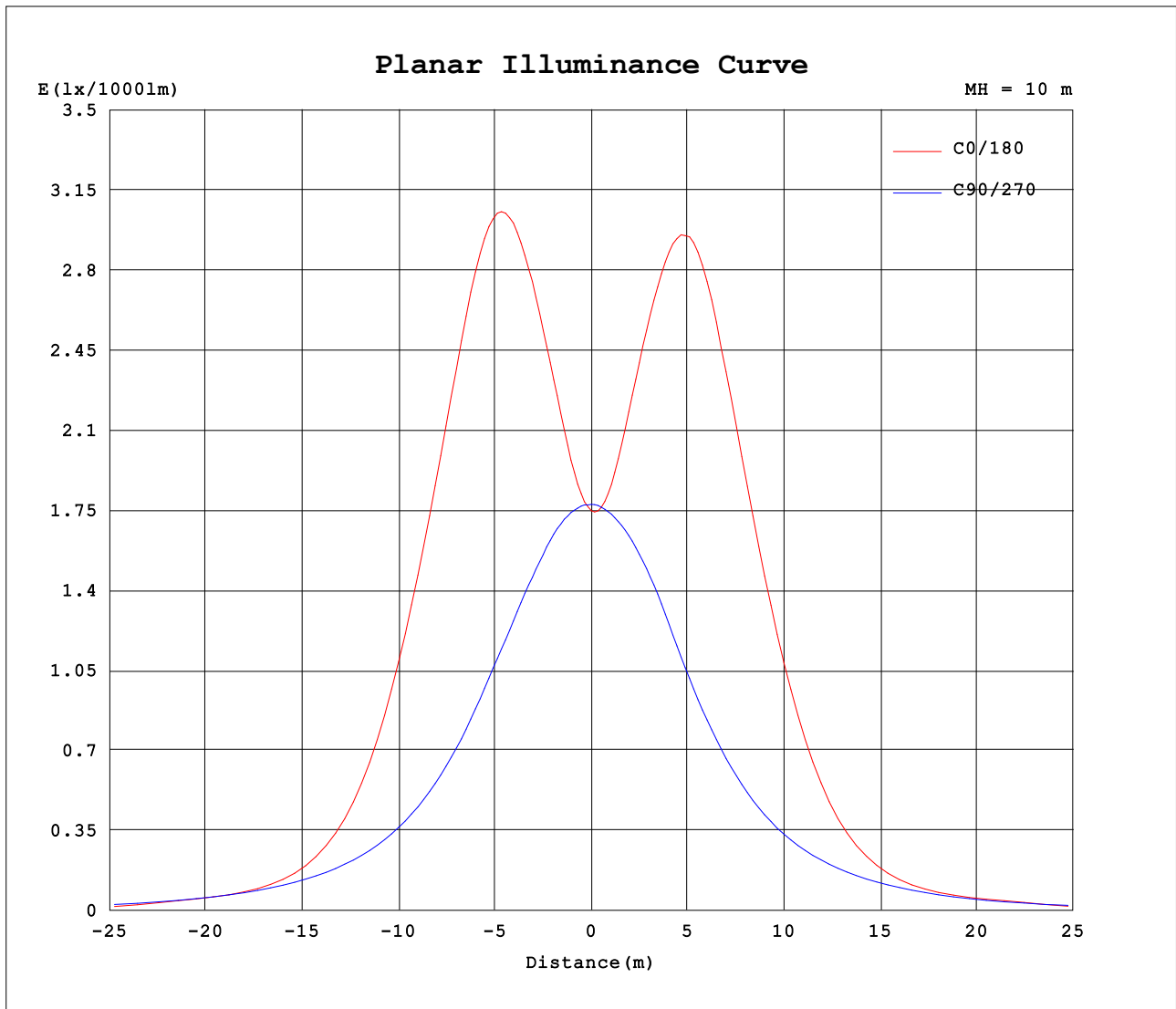


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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: 2017-11-10

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:233.22V I:0.3093A P:70.686W PF:0.9798 Freq:50.01Hz Lamp Flux:11258.9x1 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	175	174	174	176	178	177	177	175	175	174	174	176	178	177	177	175			
5	194	189	184	179	177	177	180	181	184	183	178	176	177	181	187	193			
10	236	225	205	184	175	179	197	210	221	214	196	178	174	187	209	230			
15	290	272	236	191	169	185	225	255	274	261	225	183	170	195	240	278			
20	352	328	272	202	162	194	261	312	336	317	261	190	162	203	275	333			
25	411	384	314	215	154	203	304	373	397	376	302	201	149	214	315	387			
30	443	422	356	230	143	212	351	421	435	418	347	212	135	224	354	421			
35	431	425	385	247	129	222	389	433	429	424	377	221	121	233	378	418			
40	384	393	389	261	116	232	399	406	384	391	383	230	107	239	376	383			
45	308	335	365	265	103	238	374	348	307	331	355	232	94.7	237	348	322			
50	210	252	319	253	91.3	232	325	265	211	246	305	221	83.7	223	300	237			
55	126	165	260	226	81.1	211	263	174	127	159	242	195	73.7	195	239	154			
60	77.4	100	195	190	71.3	178	196	104	75.9	95.5	178	160	63.6	160	177	92.3			
65	58.9	68.3	132	147	60.2	140	132	68.2	58.0	65.1	118	122	51.9	121	119	63.5			
70	31.1	39.3	84.6	105	47.4	100	85.2	41.7	31.3	38.1	75.4	86.0	39.7	84.8	74.6	35.7			
75	25.9	29.2	47.3	69.7	34.0	66.8	49.0	30.7	25.6	29.0	42.2	55.9	27.1	54.7	42.1	27.2			
80	23.4	24.2	32.2	39.6	20.7	38.5	31.7	25.4	23.2	24.4	28.4	30.1	15.8	29.0	28.6	22.6			
85	21.8	21.7	22.3	18.9	9.84	19.0	21.6	22.6	21.9	22.6	20.7	13.9	6.48	13.1	20.3	20.5			
90	20.9	20.9	19.7	8.86	1.81	8.84	19.9	21.5	20.6	20.7	17.5	7.16	1.09	6.90	16.9	19.3			
95	13.0	14.0	12.6	5.61	1.21	5.43	12.5	14.3	12.5	12.8	10.9	5.11	1.13	5.04	10.3	12.2			
100	8.68	9.29	9.78	5.24	1.30	5.20	9.51	9.47	8.31	8.74	8.86	4.87	1.22	4.70	8.66	8.44			
105	7.87	8.43	9.22	4.68	1.42	4.64	9.02	8.24	7.30	7.87	8.76	4.25	1.33	4.06	8.68	7.80			
110	8.01	8.77	9.40	4.28	1.52	4.35	9.08	8.64	7.58	8.46	8.50	4.10	1.42	3.79	8.38	8.16			
115	8.79	9.44	8.04	3.95	1.61	4.18	8.06	9.41	8.58	8.88	7.55	3.90	1.51	3.46	6.76	8.74			
120	7.90	8.21	6.43	3.53	1.67	3.84	6.95	8.24	7.73	7.73	6.66	3.53	1.55	3.03	5.27	7.55			
125	6.81	6.78	5.30	3.06	1.72	3.34	6.31	6.69	6.49	6.31	5.98	3.11	1.62	2.69	4.52	6.32			
130	6.26	6.40	4.42	2.67	1.76	2.85	5.57	6.27	5.95	6.10	5.37	2.69	1.69	2.35	4.00	5.91			
135	6.10	5.78	3.81	2.36	1.82	2.41	4.96	5.81	5.78	5.62	4.81	2.28	1.77	2.06	3.50	5.02			
140	5.57	4.70	3.29	2.06	1.86	1.99	4.30	5.24	5.31	5.10	4.19	1.88	1.82	1.85	3.06	3.91			
145	4.92	3.86	2.80	1.88	1.86	1.76	3.49	4.56	4.73	4.44	3.41	1.72	1.85	1.72	2.64	3.43			
150	4.10	3.17	2.37	1.73	1.86	1.76	2.68	3.73	3.96	3.62	2.64	1.76	1.86	1.80	2.29	2.93			
155	3.19	2.62	1.99	1.80	1.86	1.78	2.03	2.85	3.10	2.76	2.04	1.81	1.81	1.86	1.98	2.51			
160	2.36	2.13	1.87	1.84	1.80	1.81	1.78	2.12	2.34	2.07	1.83	1.80	1.85	1.89	1.92	2.08			
165	1.92	1.97	1.92	1.88	1.84	1.84	1.83	1.83	1.97	1.87	1.87	1.85	1.87	1.91	1.96	2.01			
170	2.01	2.02	1.95	1.90	1.88	1.88	1.89	1.91	2.05	1.95	1.92	1.90	1.90	1.92	1.98	2.04			
175	2.07	2.04	1.97	1.93	1.91	1.92	1.93	1.97	2.09	2.00	1.96	1.93	1.93	1.94	1.97	2.03			
180	2.09	2.03	1.98	1.95	1.94	1.95	1.97	2.01	2.10	2.03	1.98	1.95	1.94	1.94	1.97	2.01			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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: