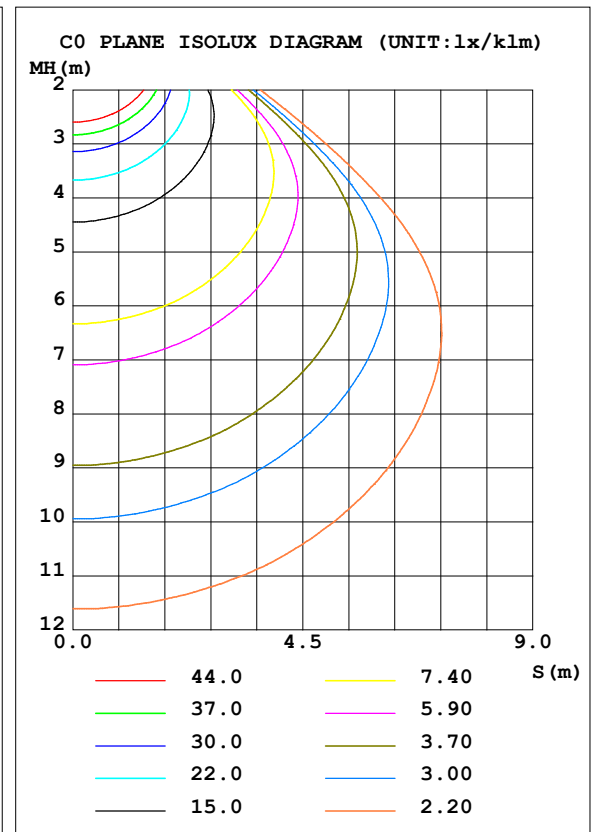
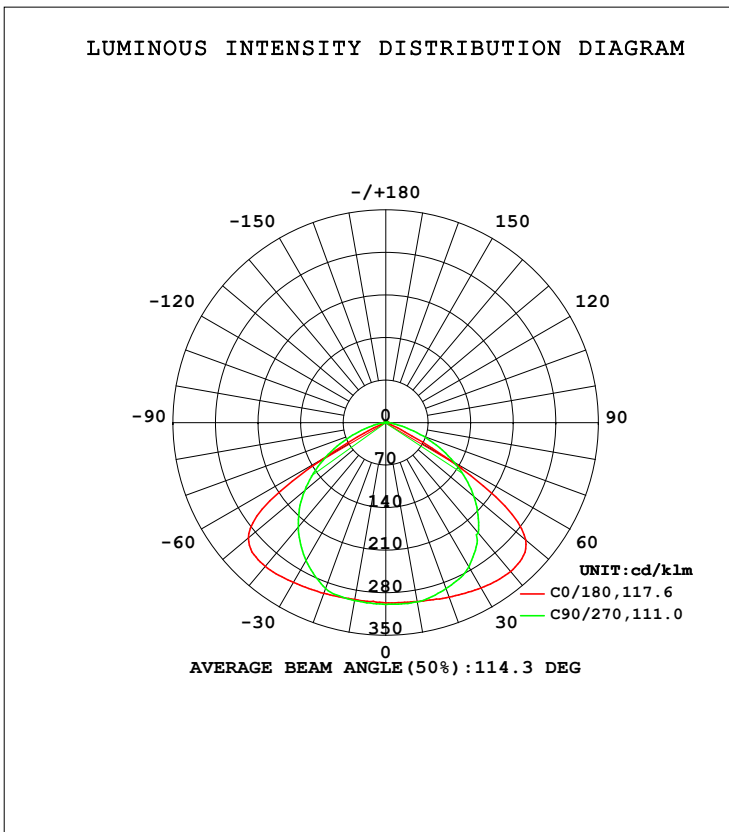


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 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-1570-40-05WH	Imax (cd/klm)	319.6	S/MH (C0/180)	1.59
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm/klm)	1000.00	η UP, DN (C0-180)	0.6, 50.8
NOMINAL FLUX (lm)	11563.7	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.6, 48.0
LAMPS INSIDE	1	η up (%)	1.2	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	230.0	η down (%)	98.8	CIBSE SHR MAX	1.55



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:

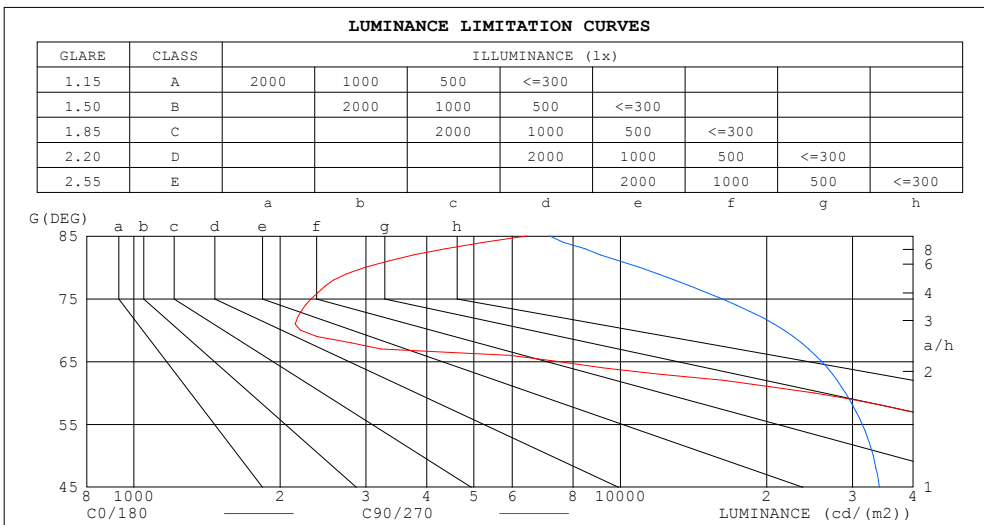
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	298.8	294.6	299.3	299.3	295.5	293.5	297.2	295.1	0- 10	28.30	28.30	2.83,2.83
20	305.6	292.7	290.5	297.3	299.0	290.8	290.3	291.1	10- 20	83.75	112.1	11.2,11.2
30	313.7	290.8	273.7	294.3	303.7	287.2	262.2	286.6	20- 30	135.1	247.1	24.7,24.7
40	319.5	289.0	237.4	289.7	308.6	282.7	224.1	281.6	30- 40	178.2	425.3	42.5,42.5
50	300.3	288.3	189.6	278.9	295.2	273.8	174.5	277.9	40- 50	208.0	633.3	63.3,63.3
60	111.2	279.5	129.3	267.8	121.4	255.5	114.7	256.6	50- 60	204.4	837.7	83.8,83.8
70	6.700	23.34	66.16	27.06	6.582	22.60	53.03	18.98	60- 70	107.8	945.6	94.6,94.6
80	4.621	4.860	16.96	4.688	3.922	4.031	12.00	4.180	70- 80	35.37	980.9	98.1,98.1
90	4.108	3.576	1.381	3.257	3.603	2.839	0.8281	3.009	80- 90	6.787	987.7	98.8,98.8
100	2.183	2.314	1.026	2.064	2.073	2.031	1.095	2.129	90-100	2.307	990.0	99,99
110	2.204	2.278	1.317	2.127	2.016	2.064	1.297	2.135	100-110	1.930	992.0	99.2,99.2
120	2.383	2.045	1.541	2.034	2.216	1.934	1.459	1.728	110-120	1.935	993.9	99.4,99.4
130	2.211	1.853	1.694	2.064	2.044	1.972	1.650	1.737	120-130	1.713	995.6	99.6,99.6
140	2.183	1.920	1.809	1.977	2.040	1.945	1.774	1.873	130-140	1.486	997.1	99.7,99.7
150	2.212	1.968	1.869	1.970	2.122	1.978	1.842	1.957	140-150	1.224	998.3	99.8,99.8
160	2.105	1.937	1.901	1.930	2.114	1.962	1.931	1.952	150-160	0.9161	999.2	99.9,99.9
170	2.117	2.023	1.996	2.009	2.138	2.037	2.010	2.023	160-170	0.5661	999.8	100,100
180	2.174	2.074	2.053	2.068	2.181	2.083	2.057	2.069	170-180	0.1963	1000.0	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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 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	6416	7159
80	2988	10966
75	2316	16182
70	2199	21718
65	7442	25961
60	24962	29041
55	47017	31423
50	52443	33114
45	50324	34090

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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 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	.284	.162	.051	.277	.158	.050	.263	.151	.048	.250	.144	.046	.238	.138	.045	
2.0	.276	.151	.046	.270	.148	.046	.257	.143	.044	.246	.138	.043	.236	.133	.042	
3.0	.261	.139	.042	.255	.137	.041	.244	.132	.040	.234	.128	.039	.225	.124	.039	
4.0	.244	.127	.037	.239	.125	.037	.229	.122	.036	.220	.118	.036	.212	.115	.035	
5.0	.228	.116	.034	.223	.115	.033	.214	.112	.033	.206	.109	.032	.199	.106	.032	
6.0	.212	.107	.030	.208	.105	.030	.201	.103	.030	.193	.101	.030	.187	.098	.029	
7.0	.199	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.175	.091	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.175	.085	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.075	.021	.147	.074	.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	.200	.200	.200	.171	.171	.171	.117	.117	.117	.067	.067	.067	.021	.021	.021	
1.0	.188	.166	.146	.161	.142	.126	.110	.098	.087	.063	.057	.050	.020	.018	.016	
2.0	.180	.141	.109	.154	.122	.095	.105	.084	.066	.061	.049	.039	.020	.016	.013	
3.0	.172	.124	.085	.148	.107	.074	.101	.074	.052	.059	.043	.031	.019	.014	.010	
4.0	.165	.110	.069	.142	.095	.060	.097	.067	.042	.056	.039	.025	.018	.013	.008	
5.0	.158	.100	.057	.136	.087	.050	.094	.060	.035	.054	.036	.021	.017	.012	.007	
6.0	.151	.092	.049	.130	.079	.043	.090	.056	.030	.052	.033	.018	.017	.011	.006	
7.0	.145	.085	.043	.125	.074	.037	.086	.052	.026	.050	.030	.016	.016	.010	.005	
8.0	.139	.079	.038	.119	.069	.033	.083	.048	.024	.048	.028	.014	.016	.009	.005	
9.0	.133	.074	.035	.114	.065	.030	.079	.045	.022	.046	.027	.013	.015	.009	.004	
10.0	.127	.070	.032	.110	.061	.028	.076	.043	.020	.044	.025	.012	.014	.008	.004	

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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 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	17.9	19.4	18.2	19.7	19.9	17.6	19.1	17.9	19.3	19.5
3H	17.7	19.1	18.1	19.4	19.6	19.2	20.6	19.5	20.9	21.1
4H	17.6	18.9	18.0	19.2	19.5	19.7	21.0	20.1	21.3	21.6
6H	17.5	18.8	17.9	19.0	19.4	19.8	21.0	20.2	21.3	21.6
8H	17.5	18.7	17.8	19.0	19.3	19.8	21.0	20.2	21.3	21.6
12H	17.5	18.6	17.8	18.9	19.2	19.8	20.9	20.1	21.2	21.5
4H 2H	18.7	20.0	19.0	20.2	20.5	18.6	19.9	18.9	20.2	20.4
3H	18.5	19.6	18.9	19.9	20.3	20.4	21.5	20.8	21.8	22.2
4H	18.4	19.4	18.8	19.8	20.1	21.2	22.2	21.6	22.5	22.9
6H	18.3	19.2	18.7	19.6	20.0	21.4	22.3	21.8	22.7	23.1
8H	18.3	19.1	18.7	19.5	19.9	21.4	22.2	21.8	22.6	23.0
12H	18.3	19.0	18.7	19.4	19.9	21.4	22.1	21.8	22.5	23.0
8H 4H	18.5	19.4	19.0	19.8	20.2	21.1	21.9	21.5	22.3	22.7
6H	18.5	19.1	18.9	19.6	20.0	21.4	22.1	21.9	22.5	23.0
8H	18.4	19.0	18.9	19.5	20.0	21.5	22.1	22.0	22.5	23.0
12H	18.4	18.9	18.9	19.4	19.9	21.5	22.0	22.0	22.5	23.0
12H 4H	18.5	19.3	19.0	19.7	20.1	21.1	21.8	21.5	22.2	22.7
6H	18.5	19.1	18.9	19.5	20.0	21.4	22.0	21.8	22.4	22.9
8H	18.4	19.0	18.9	19.4	19.9	21.5	22.0	21.9	22.4	22.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 0.8					+ 0.1 / - 0.1				
1.5H	+ 1.6 / - 2.9					+ 0.7 / - 1.5				
2.0H	+ 1.5 / - 4.3					+ 1.5 / - 2.9				

CIE Pub.117, 11564 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:2017-11-10

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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

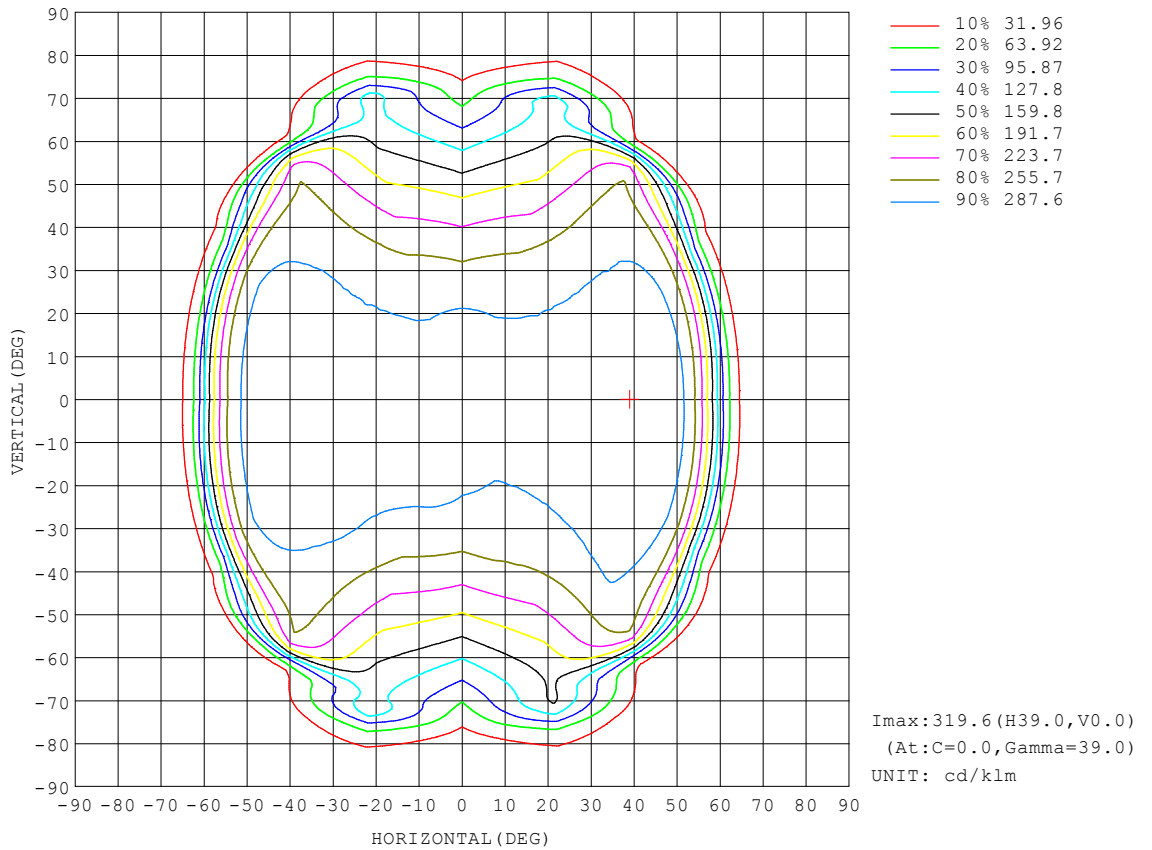
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	43	36	54	43	36	53	42	36	29
0.80	66	54	47	65	54	47	63	53	46	39
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	73	66	82	72	66	79	71	65	57
1.50	89	79	72	87	78	72	84	76	70	63
2.00	96	88	81	94	86	81	90	84	79	71
2.50	100	92	86	97	91	85	94	88	83	75
3.00	103	96	91	101	95	90	97	92	88	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	100	106	102	99	102	98	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:2017-11-10

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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

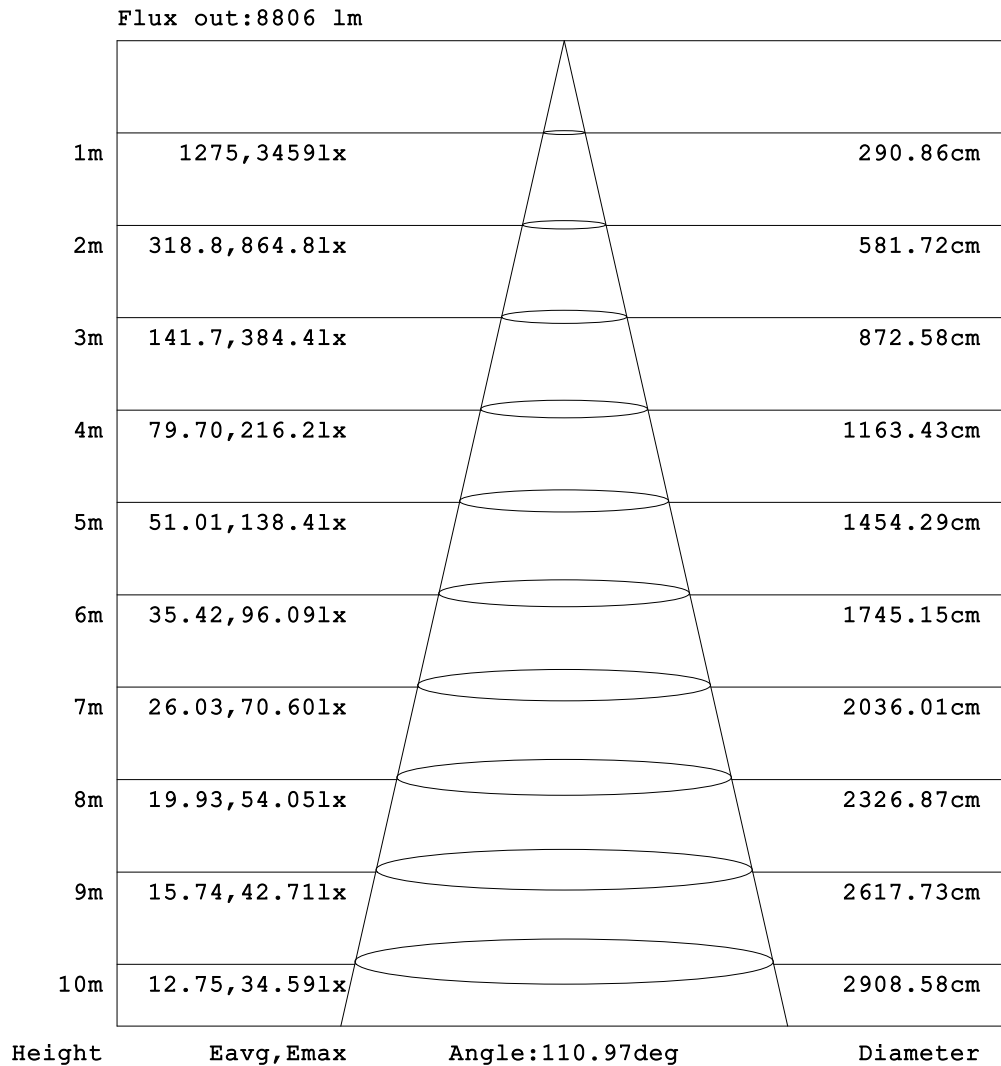


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Kaye
Test Date:2017-11-10

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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

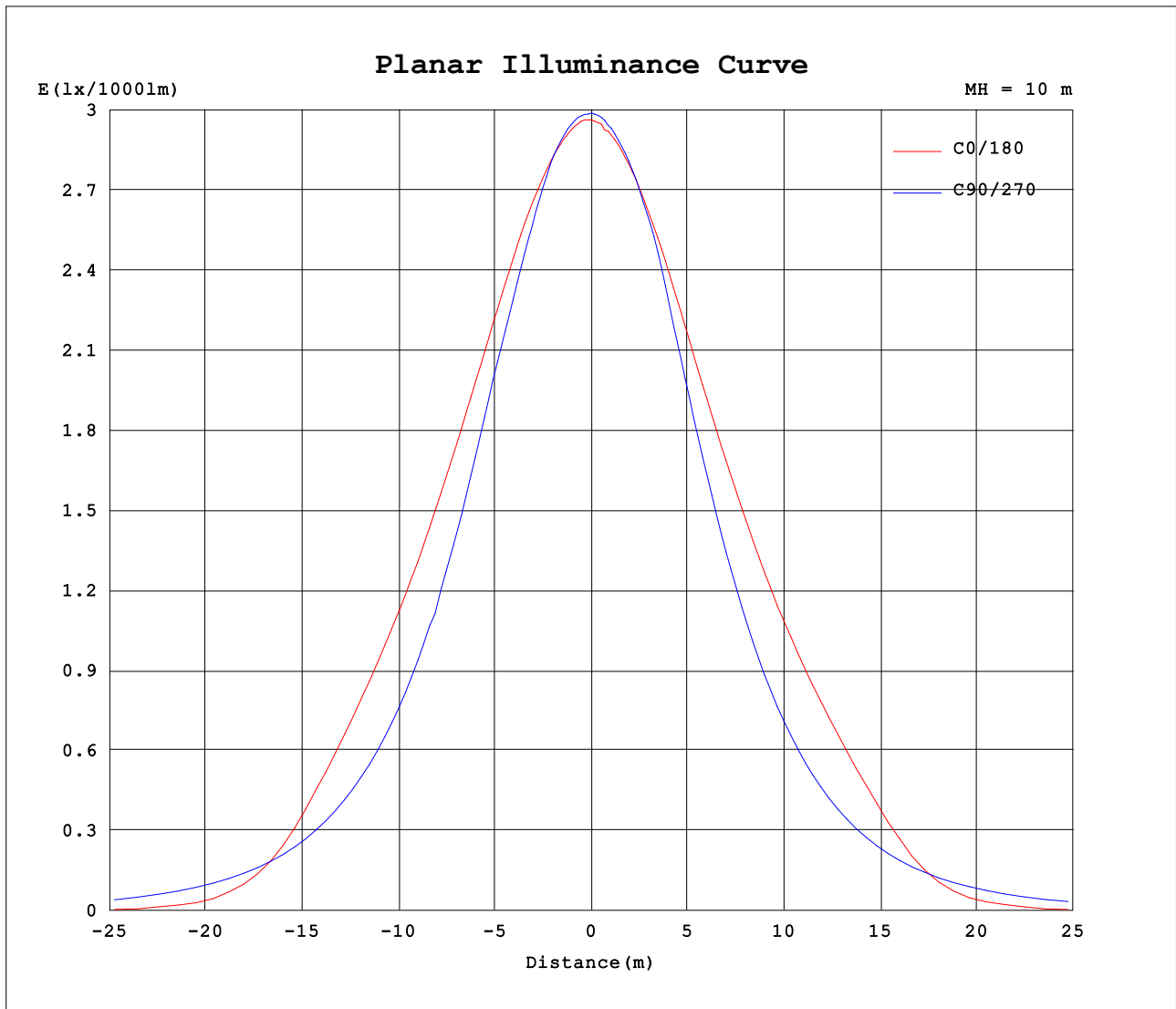


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:232.69V I:0.3096A P:70.604W PF:0.9800 Freq:49.99Hz Lamp Flux:11563.7x1 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	296	295	295	297	299	299	298	294	296	295	295	297	299	299	298	294			
5	297	295	295	297	299	300	299	295	295	294	295	298	298	299	297	294			
10	299	296	295	295	299	300	299	295	296	294	294	295	297	298	295	294			
15	302	298	294	292	296	299	299	297	297	295	293	292	295	294	294	295			
20	306	300	293	288	291	298	297	297	299	296	291	288	290	288	291	296			
25	310	303	292	283	284	291	297	300	301	297	289	282	278	282	289	299			
30	314	306	291	278	274	281	294	301	304	299	287	272	262	273	287	300			
35	318	308	290	272	257	268	292	303	307	301	284	258	245	259	284	302			
40	320	310	289	259	237	252	290	305	309	303	283	242	224	243	282	302			
45	317	310	289	242	215	233	284	306	307	303	279	222	201	225	280	300			
50	300	303	288	224	190	214	279	301	295	297	274	203	175	205	278	293			
55	240	272	287	205	161	195	274	282	248	270	267	182	145	185	271	258			
60	111	161	279	185	129	173	268	196	121	165	255	161	115	165	257	137			
65	28.0	38.4	195	169	97.7	153	227	46.0	31.7	36.2	178	143	83.3	148	146	29.2			
70	6.70	9.03	23.3	167	66.2	142	27.1	9.53	6.58	8.44	22.6	140	53.0	150	19.0	8.01			
75	5.34	5.45	11.2	118	37.3	126	12.2	5.42	4.83	5.01	9.17	82.5	28.0	75.1	8.72	5.03			
80	4.62	4.49	4.86	41.3	17.0	44.1	4.69	4.17	3.92	3.94	4.03	28.3	12.0	28.3	4.18	4.23			
85	4.98	4.84	3.97	9.55	5.56	11.1	3.73	4.67	4.71	4.69	3.71	3.41	3.81	3.28	3.89	4.73			
90	4.11	4.22	3.58	2.30	1.38	2.16	3.26	3.99	3.60	3.44	2.84	1.81	0.83	1.79	3.01	3.54			
95	2.72	2.88	2.58	1.46	0.89	1.33	2.32	2.66	2.49	2.48	2.21	1.28	0.94	1.30	2.30	2.56			
100	2.18	2.37	2.31	1.45	1.03	1.33	2.06	2.24	2.07	2.12	2.03	1.32	1.09	1.34	2.13	2.14			
105	2.09	2.24	2.22	1.48	1.14	1.41	2.05	2.13	1.95	2.04	2.02	1.35	1.17	1.36	2.12	2.06			
110	2.20	2.32	2.28	1.56	1.32	1.50	2.13	2.20	2.02	2.14	2.06	1.47	1.30	1.47	2.13	2.22			
115	2.41	2.47	2.20	1.68	1.45	1.64	2.11	2.35	2.21	2.24	2.01	1.60	1.40	1.52	1.93	2.31			
120	2.38	2.36	2.04	1.72	1.54	1.74	2.03	2.28	2.22	2.17	1.93	1.62	1.46	1.55	1.73	2.22			
125	2.26	2.20	1.91	1.73	1.62	1.75	2.06	2.12	2.10	2.03	1.97	1.66	1.55	1.61	1.71	2.08			
130	2.21	2.15	1.85	1.79	1.69	1.75	2.06	2.11	2.04	2.04	1.97	1.68	1.65	1.68	1.74	2.04			
135	2.21	2.15	1.86	1.85	1.76	1.76	2.02	2.11	2.05	2.05	1.95	1.71	1.73	1.75	1.78	1.99			
140	2.18	2.07	1.92	1.87	1.81	1.80	1.98	2.07	2.04	2.03	1.95	1.76	1.77	1.78	1.87	1.91			
145	2.19	2.09	1.97	1.86	1.84	1.83	1.97	2.05	2.07	2.03	1.96	1.82	1.83	1.78	1.94	2.00			
150	2.21	2.12	1.97	1.80	1.87	1.87	1.97	2.07	2.12	2.06	1.98	1.88	1.84	1.83	1.96	2.05			
155	2.18	2.11	1.94	1.86	1.89	1.89	1.94	2.05	2.15	2.06	1.96	1.91	1.88	1.88	1.94	2.06			
160	2.10	2.06	1.94	1.91	1.90	1.93	1.93	2.00	2.11	2.02	1.96	1.93	1.93	1.93	1.95	2.03			
165	2.07	2.05	1.98	1.96	1.95	1.97	1.97	1.98	2.10	2.01	2.00	1.97	1.97	1.97	1.99	2.04			
170	2.12	2.08	2.02	2.00	2.00	2.01	2.01	2.02	2.14	2.05	2.04	2.01	2.01	2.01	2.02	2.06			
175	2.15	2.09	2.05	2.03	2.03	2.04	2.04	2.06	2.17	2.08	2.06	2.04	2.04	2.04	2.05	2.07			
180	2.17	2.11	2.07	2.06	2.05	2.06	2.07	2.08	2.18	2.10	2.08	2.06	2.06	2.06	2.07	2.08			

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: