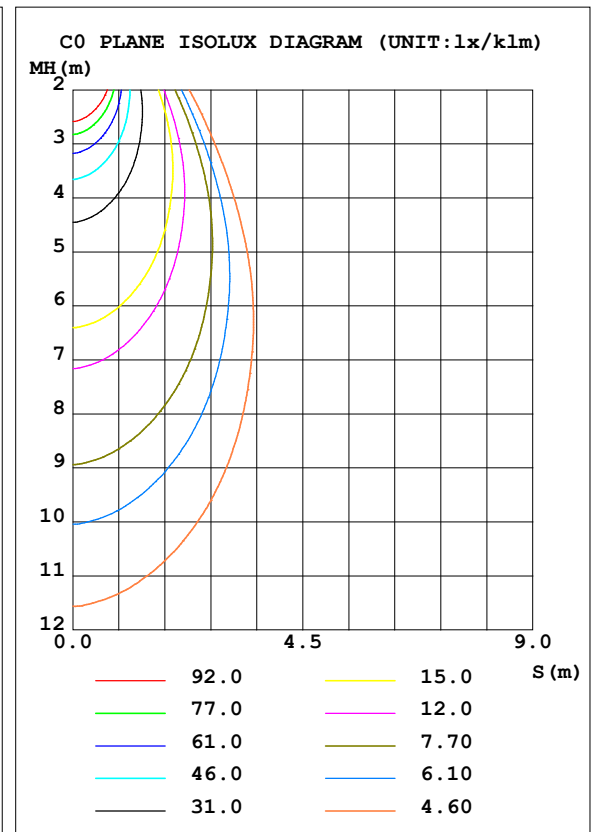
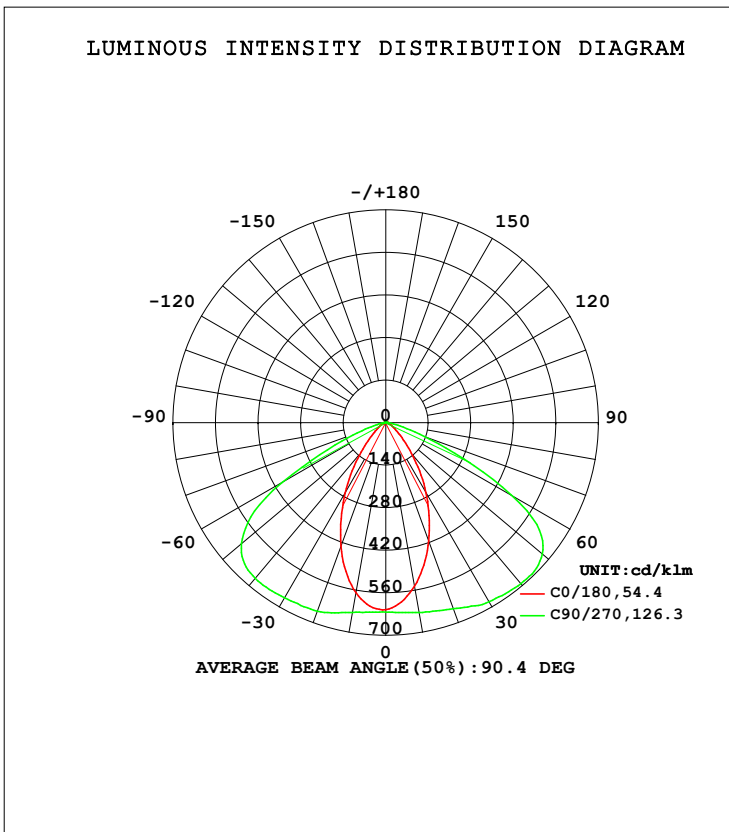


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 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: 164.93 lm/W			
MODEL	CFLS-1570-40NR-05WH	I _{max} (cd/klm)	692.9	S/MH (C0/180)	0.83
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.63
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	0.8, 50.7
NOMINAL FLUX (lm)	11660.3	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.8, 47.6
LAMPS INSIDE	1	η up (%)	1.6	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	230.0	η down (%)	98.4	CIBSE SHR MAX	0.85



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:

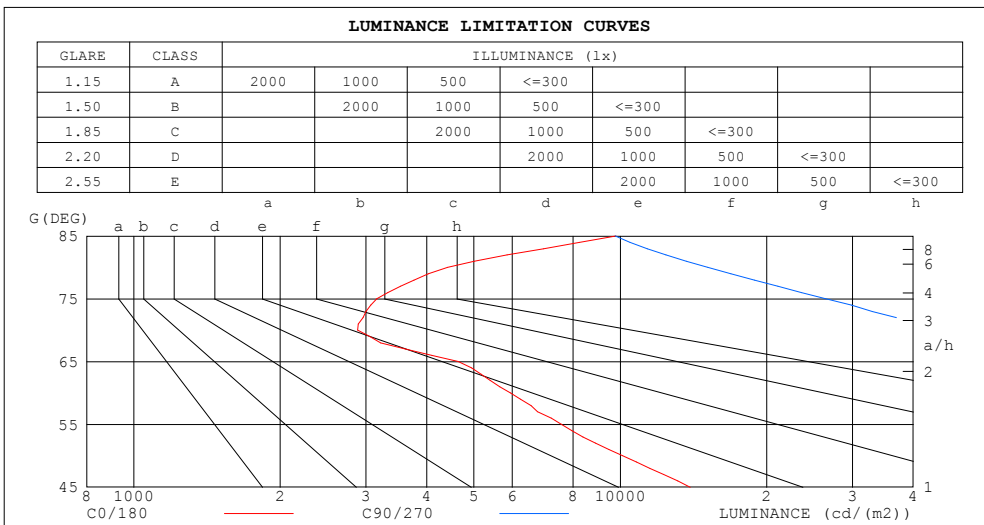
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	545.6	574.3	634.4	608.9	568.4	593.6	634.2	579.0	0- 10	57.70	57.70	5.77,5.77
20	413.4	489.0	651.4	536.7	432.0	515.2	660.1	488.7	10- 20	157.7	215.4	21.5,21.5
30	265.2	356.8	680.6	396.6	267.4	369.8	665.8	347.2	20- 30	217.1	432.5	43.3,43.3
40	132.4	191.7	691.5	203.4	126.5	180.4	668.9	175.4	30- 40	218.8	651.4	65.1,65.1
50	57.37	69.18	672.3	65.27	49.25	55.55	620.0	60.50	40- 50	160.6	812.0	81.2,81.2
60	26.23	29.92	477.4	27.15	22.86	24.00	394.7	25.49	50- 60	98.10	910.1	91,91
70	8.714	15.96	138.9	15.27	8.665	14.11	99.74	14.19	60- 70	49.15	959.2	95.9,95.9
80	6.774	7.280	23.22	8.200	7.168	7.793	15.83	6.752	70- 80	17.13	976.3	97.6,97.6
90	6.574	5.559	1.538	6.356	6.454	5.738	0.9382	4.837	80- 90	7.192	983.5	98.4,98.4
100	3.663	3.145	1.174	3.555	3.474	3.300	1.235	2.780	90-100	3.838	987.4	98.7,98.7
110	2.617	2.647	1.431	3.015	2.555	2.805	1.666	2.391	100-110	2.655	990.0	99,99
120	2.291	2.129	1.773	2.383	2.295	2.292	2.050	1.877	110-120	2.271	992.3	99.2,99.2
130	2.026	2.212	2.080	2.378	1.999	2.304	2.500	2.091	120-130	1.947	994.2	99.4,99.4
140	2.334	2.454	2.456	2.508	2.202	2.443	2.606	2.327	130-140	1.770	996.0	99.6,99.6
150	2.706	2.630	2.800	2.618	2.499	2.560	2.882	2.509	140-150	1.563	997.6	99.8,99.8
160	2.967	2.829	3.028	2.822	2.768	2.775	3.098	2.776	150-160	1.265	998.8	99.9,99.9
170	3.337	3.193	3.265	3.178	3.254	3.153	3.299	3.184	160-170	0.8561	999.7	100,100
180	3.535	3.385	3.402	3.397	3.547	3.390	3.408	3.403	170-180	0.3150	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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 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	9800	9762
80	4416	15136
75	3161	26411
70	2884	45977
65	4642	76274
60	5939	108099
55	7567	121884
50	10104	118407
45	13933	110661

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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 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	.237	.135	.043	.229	.131	.042	.215	.124	.039	.203	.117	.038	.191	.111	.036	
2.0	.227	.125	.038	.221	.122	.038	.209	.116	.036	.198	.111	.035	.188	.106	.033	
3.0	.215	.115	.034	.210	.112	.034	.199	.108	.033	.190	.104	.032	.181	.100	.031	
4.0	.203	.106	.031	.198	.104	.031	.189	.100	.030	.180	.097	.029	.172	.094	.029	
5.0	.191	.097	.028	.187	.096	.028	.179	.093	.027	.171	.090	.027	.164	.088	.026	
6.0	.180	.090	.026	.177	.089	.026	.169	.087	.025	.162	.084	.025	.156	.082	.024	
7.0	.170	.084	.024	.167	.083	.024	.160	.081	.023	.154	.079	.023	.148	.077	.023	
8.0	.161	.079	.022	.158	.078	.022	.152	.076	.022	.146	.074	.021	.141	.072	.021	
9.0	.153	.074	.021	.150	.073	.020	.144	.071	.020	.139	.070	.020	.135	.068	.020	
10.0	.145	.069	.019	.142	.069	.019	.137	.067	.019	.133	.066	.019	.128	.065	.019	

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	.203	.203	.203	.174	.174	.174	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.188	.169	.153	.161	.145	.132	.110	.100	.091	.063	.058	.053	.020	.019	.017	
2.0	.176	.145	.119	.151	.125	.102	.104	.086	.071	.060	.050	.042	.019	.016	.014	
3.0	.167	.127	.095	.143	.109	.082	.098	.076	.058	.057	.044	.034	.018	.014	.011	
4.0	.158	.113	.078	.136	.097	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
5.0	.151	.102	.066	.130	.088	.057	.089	.062	.040	.052	.036	.024	.017	.012	.008	
6.0	.144	.093	.057	.124	.081	.050	.085	.057	.035	.050	.033	.021	.016	.011	.007	
7.0	.138	.086	.050	.118	.075	.044	.082	.052	.031	.048	.031	.018	.015	.010	.006	
8.0	.132	.080	.045	.113	.070	.039	.079	.049	.028	.046	.029	.017	.015	.009	.005	
9.0	.126	.075	.041	.109	.065	.036	.075	.046	.025	.044	.027	.015	.014	.009	.005	
10.0	.121	.071	.038	.105	.062	.033	.073	.043	.023	.042	.026	.014	.014	.008	.005	

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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 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	8.5	9.8	8.8	10.0	10.2	19.8	21.0	20.1	21.2	21.5
3H	8.6	9.8	8.9	10.0	10.3	20.6	21.7	20.9	22.0	22.2
4H	8.7	9.8	9.0	10.0	10.3	20.7	21.8	21.0	22.0	22.3
6H	8.8	9.8	9.1	10.1	10.4	20.7	21.7	21.0	22.0	22.3
8H	8.9	9.9	9.3	10.2	10.5	20.7	21.6	21.0	21.9	22.3
12H	9.2	10.2	9.6	10.5	10.8	20.6	21.6	21.0	21.9	22.2
4H 2H	8.7	9.7	9.0	10.0	10.3	19.5	20.6	19.8	20.8	21.1
3H	8.9	9.8	9.3	10.1	10.5	20.3	21.2	20.7	21.5	21.9
4H	9.0	9.9	9.4	10.2	10.5	20.4	21.3	20.8	21.6	22.0
6H	9.2	10.0	9.7	10.4	10.7	20.5	21.2	20.9	21.6	22.0
8H	9.5	10.2	9.9	10.6	11.0	20.5	21.1	20.9	21.5	21.9
12H	9.9	10.6	10.4	11.0	11.4	20.4	21.1	20.9	21.5	21.9
8H 4H	9.1	9.8	9.6	10.2	10.6	20.3	21.0	20.7	21.4	21.8
6H	9.5	10.1	10.0	10.5	10.9	20.3	20.9	20.8	21.3	21.8
8H	9.9	10.4	10.3	10.8	11.3	20.3	20.8	20.8	21.3	21.8
12H	10.5	11.0	11.0	11.4	11.9	20.3	20.8	20.8	21.2	21.7
12H 4H	9.1	9.8	9.6	10.2	10.6	20.2	20.9	20.7	21.3	21.7
6H	9.6	10.1	10.1	10.5	11.0	20.3	20.8	20.8	21.2	21.7
8H	10.0	10.4	10.5	10.9	11.4	20.3	20.7	20.8	21.2	21.7
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.5					+ 1.9 / - 3.0				
1.5H	+ 1.3 / - 1.1					+ 4.1 / - 5.3				
2.0H	+ 1.6 / - 0.9					+ 5.2 / - 8.3				

CIE Pub.117, 11660 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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

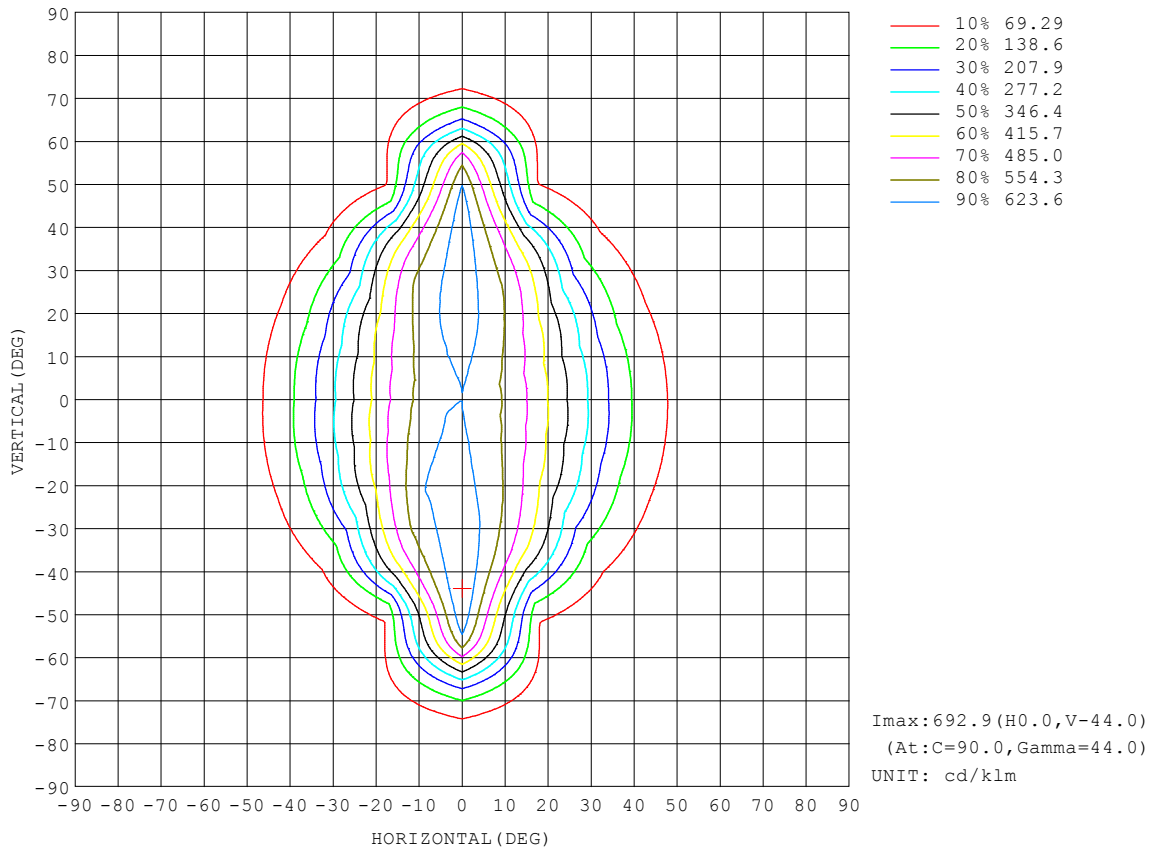
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	69	60	54	69	60	54	68	59	54	49
0.80	79	70	64	78	70	64	76	69	64	58
1.00	86	78	72	85	77	72	83	78	71	66
1.25	92	84	79	91	84	79	89	82	78	72
1.50	96	89	84	95	88	83	92	86	82	76
2.00	102	95	90	100	94	90	96	92	88	81
2.50	104	98	94	102	97	93	99	94	91	84
3.00	107	102	97	105	100	96	101	97	94	86
4.00	110	105	102	107	104	100	103	100	98	89
5.00	111	108	105	109	106	103	104	102	100	91
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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

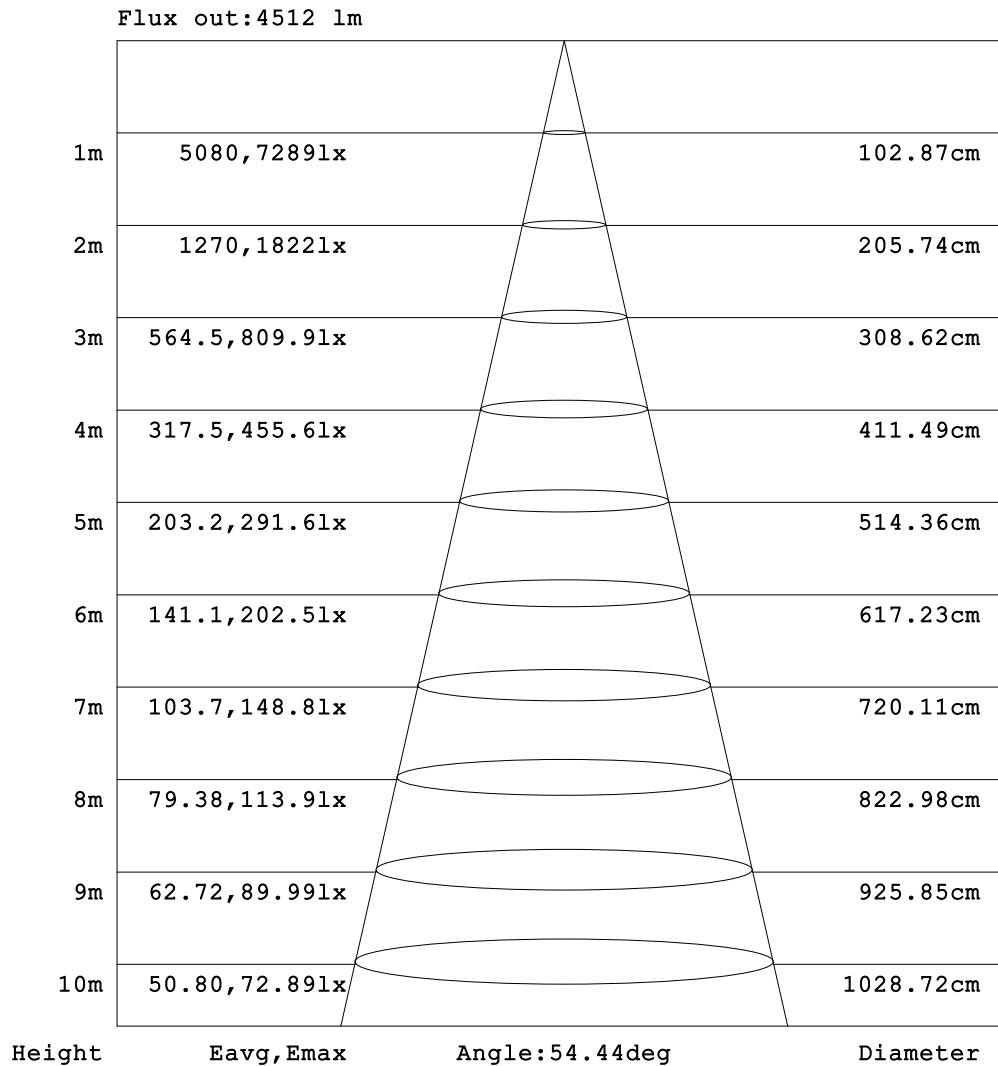


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

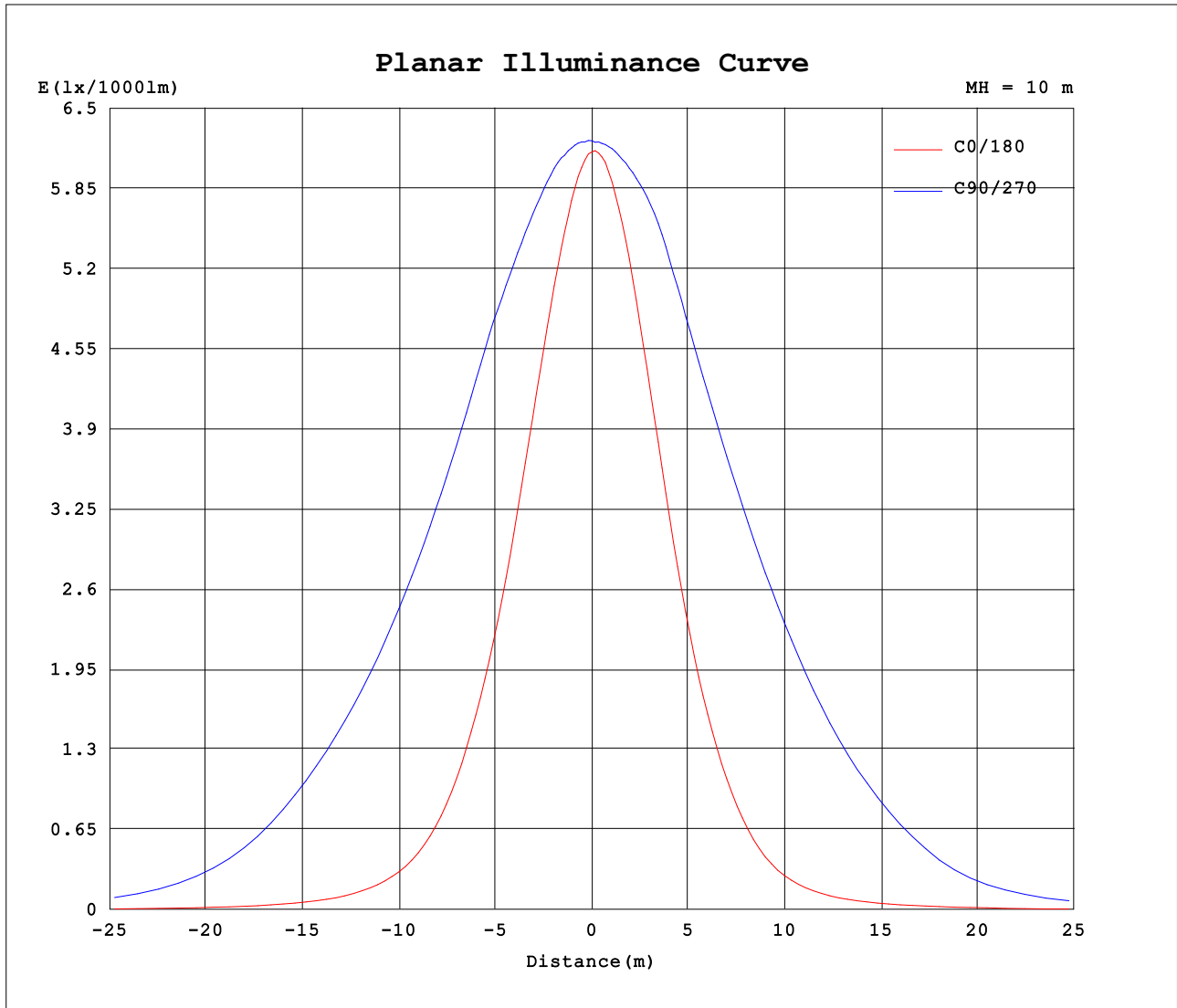


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:232.53V I:0.3103A P:70.700W PF:0.9800 Freq:50.04Hz Lamp Flux:11660.3x1 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	615	612	613	619	624	625	624	614	615	612	613	619	624	625	624	614			
5	592	592	601	614	627	628	624	610	606	604	611	621	626	621	608	591			
10	546	550	574	606	634	630	609	582	568	572	594	620	634	616	579	548			
15	485	497	536	595	641	632	580	532	508	519	562	616	648	606	539	491			
20	413	431	489	579	651	631	537	465	432	450	515	606	660	587	489	424			
25	337	358	429	557	667	612	476	385	349	369	452	589	664	561	426	349			
30	265	284	357	524	681	576	397	301	267	285	370	554	666	519	347	274			
35	195	211	275	475	687	523	302	221	193	205	275	491	670	454	261	199			
40	132	144	192	390	691	438	203	147	127	134	180	390	669	354	175	132			
45	87.0	92.3	116	262	691	302	118	88.8	78.0	80.5	102	239	657	216	104	84.3			
50	57.4	59.5	69.2	129	672	133	65.3	55.0	49.2	49.4	55.6	100	620	100	60.5	53.5			
55	38.3	38.7	43.8	61.0	618	59.4	40.0	35.2	33.3	31.9	34.5	46.3	543	48.0	37.6	34.7			
60	26.2	27.1	29.9	36.9	477	36.9	27.1	25.2	22.9	23.1	24.0	30.8	395	30.1	25.5	24.4			
65	17.3	19.3	21.0	25.4	285	27.3	19.5	17.9	15.0	16.6	17.8	23.4	212	21.7	18.3	17.5			
70	8.71	10.2	16.0	19.1	139	21.5	15.3	9.84	8.66	9.40	14.1	18.8	99.7	16.7	14.2	9.19			
75	7.23	7.69	9.67	14.7	60.4	17.2	9.60	7.99	7.56	7.70	9.04	14.6	41.9	12.6	8.16	7.16			
80	6.77	6.77	7.28	10.1	23.2	12.1	8.20	7.27	7.17	7.13	7.79	9.20	15.8	7.84	6.75	6.50			
85	7.54	7.08	6.12	4.77	7.52	6.16	7.12	7.48	7.56	7.40	6.86	5.15	4.84	4.07	5.84	6.96			
90	6.57	6.61	5.56	2.87	1.54	3.73	6.36	6.88	6.45	6.28	5.74	3.09	0.94	2.25	4.84	6.00			
95	4.75	4.86	4.04	1.76	1.07	2.29	4.60	4.98	4.67	4.69	4.10	2.17	1.05	1.67	3.40	4.47			
100	3.66	3.71	3.14	1.78	1.17	2.24	3.55	3.72	3.47	3.52	3.30	2.15	1.23	1.71	2.78	3.42			
105	2.99	3.05	2.77	1.77	1.30	2.11	3.17	3.06	2.81	2.92	2.99	2.03	1.46	1.72	2.57	2.79			
110	2.62	2.69	2.65	1.82	1.43	2.09	3.01	2.82	2.56	2.71	2.81	2.10	1.67	1.85	2.39	2.54			
115	2.51	2.60	2.37	1.96	1.63	2.20	2.67	2.78	2.55	2.60	2.51	2.21	1.87	1.99	2.08	2.37			
120	2.29	2.28	2.13	2.07	1.77	2.28	2.38	2.45	2.29	2.33	2.29	2.31	2.05	2.07	1.88	2.12			
125	2.10	2.07	2.12	2.17	1.91	2.35	2.37	2.21	2.10	2.08	2.29	2.40	2.30	2.15	1.93	1.95			
130	2.03	2.09	2.21	2.24	2.08	2.42	2.38	2.14	2.00	2.05	2.30	2.49	2.50	2.22	2.09	1.98			
135	2.16	2.22	2.34	2.31	2.27	2.48	2.43	2.21	2.08	2.11	2.37	2.58	2.55	2.31	2.21	2.00			
140	2.33	2.26	2.45	2.37	2.46	2.53	2.51	2.31	2.20	2.21	2.44	2.62	2.61	2.37	2.33	2.03			
145	2.52	2.41	2.55	2.47	2.63	2.62	2.57	2.44	2.35	2.33	2.51	2.69	2.74	2.38	2.43	2.24			
150	2.71	2.59	2.63	2.56	2.80	2.75	2.62	2.55	2.50	2.44	2.56	2.80	2.88	2.58	2.51	2.42			
155	2.86	2.75	2.70	2.75	2.94	2.87	2.68	2.65	2.63	2.53	2.62	2.91	2.96	2.78	2.61	2.58			
160	2.97	2.86	2.83	2.95	3.03	3.00	2.82	2.74	2.77	2.64	2.78	2.98	3.10	2.98	2.78	2.71			
165	3.12	3.00	3.01	3.11	3.16	3.13	3.01	2.91	2.98	2.85	2.97	3.12	3.21	3.14	2.99	2.92			
170	3.34	3.19	3.19	3.25	3.27	3.23	3.18	3.12	3.25	3.08	3.15	3.24	3.30	3.27	3.18	3.14			
175	3.48	3.33	3.32	3.35	3.34	3.34	3.31	3.29	3.46	3.27	3.30	3.33	3.37	3.36	3.34	3.30			
180	3.54	3.39	3.38	3.40	3.40	3.40	3.40	3.38	3.55	3.38	3.39	3.40	3.41	3.40	3.40	3.38			

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: