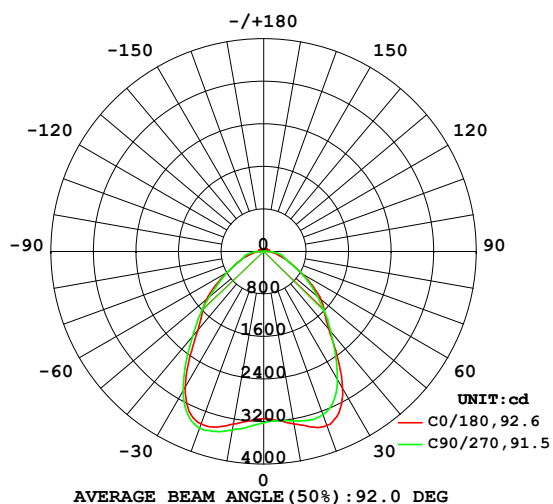


LUMINAIRE PHOTOMETRIC TEST REPORT

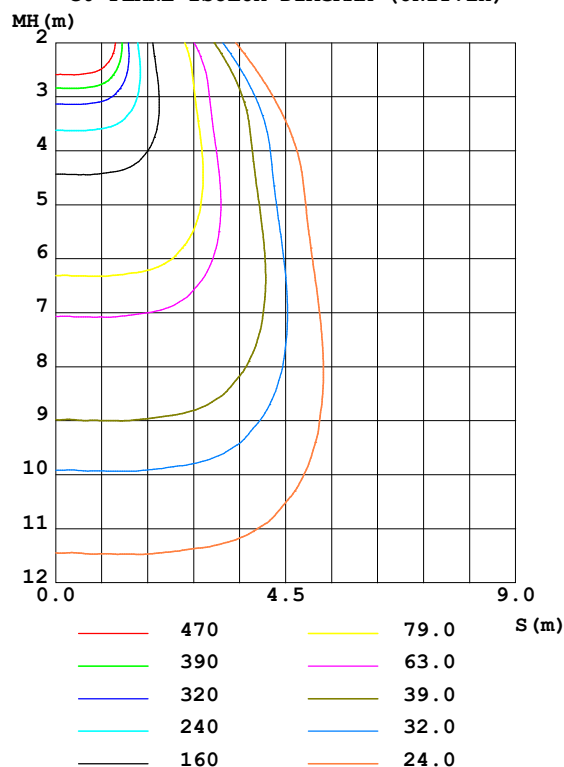
Test:U:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 162.34 lm/W			
MODEL	CTLS-1550-40WD-04WH	I _{max} (cd)	3696	S/MH (C0/180)	1.24
NOMINAL POWER (W)	50	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	8065.3	η UP, DN (C0-180)	1.9, 47.6
NOMINAL FLUX (lm)	8065.27	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.8, 48.8
LAMPS INSIDE	1	η up (%)	3.7	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230.0	η down (%)	96.3	CIBSE SHR MAX	1.25

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: zcx
 Test Date: 2020-06-18

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:

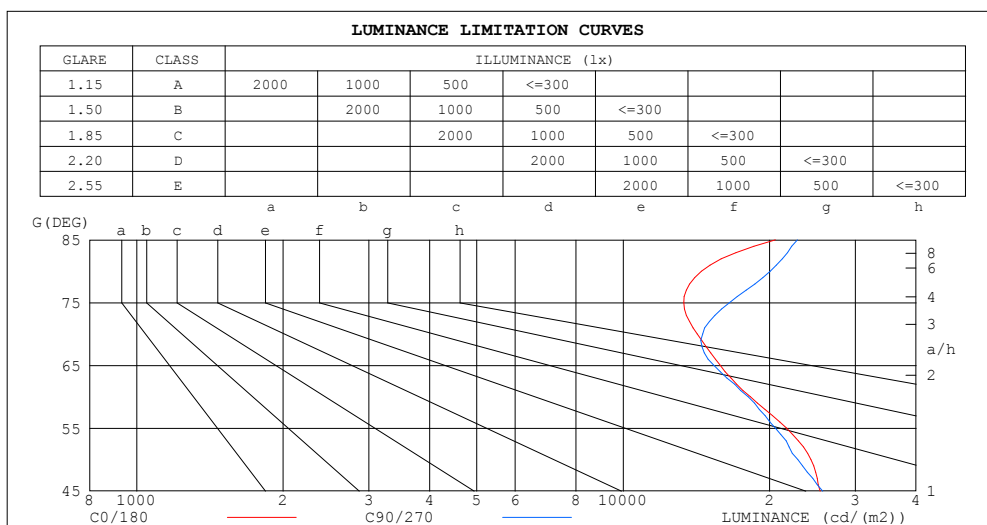
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3294	3231	3233	3345	3296	3393	3410	3319	0- 10	309.9	309.9	3.84,3.84
20	3482	3288	3265	3476	3450	3696	3535	3466	10- 20	968.5	1278	15.9,15.9
30	2963	2758	2778	2996	2950	3177	3031	2905	20- 30	1507	2785	34.5,34.5
40	1912	1844	1967	2041	1927	2123	2085	1897	30- 40	1528	4313	53.5,53.5
50	1408	1364	1321	1489	1407	1551	1338	1382	40- 50	1290	5603	69.5,69.5
60	821.5	808.2	812.7	904.5	797.4	914.2	800.1	838.6	50- 60	1007	6610	82,82
70	437.0	462.8	448.5	500.3	443.0	497.1	439.2	477.2	60- 70	625.2	7235	89.7,89.7
80	226.5	230.7	313.7	242.6	223.6	237.1	316.1	232.6	70- 80	359.8	7595	94.2,94.2
90	102.8	89.93	35.32	93.73	103.4	94.97	42.19	91.78	80- 90	173.3	7768	96.3,96.3
100	62.40	58.93	16.10	54.63	61.71	52.44	13.97	53.87	90-100	60.56	7829	97.1,97.1
110	89.28	73.52	17.96	73.81	90.51	73.73	15.20	72.36	100-110	66.95	7896	97.9,97.9
120	73.41	51.47	16.76	58.19	74.25	57.15	15.73	48.54	110-120	55.04	7951	98.6,98.6
130	66.89	44.08	16.27	51.89	67.04	51.59	15.93	42.14	120-130	42.79	7994	99.1,99.1
140	57.37	35.33	16.11	42.16	57.20	41.92	16.25	34.39	130-140	31.98	8026	99.5,99.5
150	44.02	26.33	16.36	31.06	43.85	30.73	16.69	25.68	140-150	20.52	8046	99.8,99.8
160	28.92	20.70	17.15	21.69	29.43	21.39	17.22	20.07	150-160	11.61	8058	99.9,99.9
170	19.99	18.25	17.98	17.63	20.11	17.64	17.81	17.93	160-170	5.609	8064	100,100
180	19.84	18.70	18.54	18.60	19.91	18.74	18.60	18.62	170-180	1.762	8065	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	20565	22804
80	14493	20071
75	13324	16538
70	14197	14571
65	15839	15371
60	18255	18061
55	21673	20554
50	24333	22839
45	25396	25716

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zcx
Test Date:2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.282	.160	.051	.274	.156	.050	.259	.148	.047	.245	.141	.045	.232	.134	.043		
2.0	.263	.144	.044	.256	.141	.043	.243	.135	.042	.230	.129	.040	.219	.124	.039		
3.0	.245	.130	.039	.238	.128	.038	.226	.123	.037	.215	.118	.036	.205	.114	.035		
4.0	.227	.118	.035	.222	.116	.034	.211	.112	.033	.201	.108	.033	.192	.104	.032		
5.0	.211	.108	.031	.206	.106	.031	.197	.103	.030	.188	.099	.030	.180	.096	.029		
6.0	.197	.099	.028	.193	.097	.028	.184	.095	.027	.177	.092	.027	.169	.089	.026		
7.0	.185	.091	.026	.181	.090	.026	.173	.088	.025	.166	.085	.025	.159	.083	.024		
8.0	.173	.085	.024	.170	.084	.024	.163	.081	.023	.157	.079	.023	.150	.077	.022		
9.0	.163	.079	.022	.160	.078	.022	.154	.076	.022	.148	.074	.021	.142	.072	.021		
10.0	.154	.074	.021	.151	.073	.020	.146	.071	.020	.140	.070	.020	.135	.068	.020		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.219	.219	.219	.187	.187	.187	.127	.127	.127	.073	.073	.073	.023	.023	.023		
1.0	.207	.185	.165	.177	.158	.142	.121	.109	.098	.070	.063	.057	.022	.020	.018		
2.0	.197	.161	.130	.169	.138	.112	.116	.096	.078	.067	.056	.046	.021	.018	.015		
3.0	.188	.143	.107	.161	.123	.092	.111	.086	.065	.064	.050	.038	.021	.016	.013		
4.0	.180	.129	.090	.155	.112	.078	.106	.078	.055	.061	.046	.033	.020	.015	.011		
5.0	.173	.119	.079	.148	.103	.069	.102	.072	.048	.059	.042	.029	.019	.014	.009		
6.0	.166	.110	.070	.142	.095	.061	.098	.067	.043	.057	.039	.026	.018	.013	.009		
7.0	.159	.103	.064	.137	.089	.056	.095	.063	.040	.055	.037	.024	.018	.012	.008		
8.0	.153	.097	.059	.132	.085	.052	.091	.059	.037	.053	.035	.022	.017	.011	.007		
9.0	.147	.093	.056	.127	.080	.048	.088	.056	.034	.051	.033	.021	.017	.011	.007		
10.0	.142	.088	.053	.122	.077	.046	.085	.054	.033	.050	.032	.019	.016	.010	.006		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm											
NAME: LED Linear Lighting System					TYPE:			WEIGHT:2kg			
SPEC.:					DIM.: 1500*60*45mm			SERIAL No.:			
MFR.: CoreShine					SUR.:1500*60mm			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		15.2	16.6	15.5	16.8	17.1	15.1	16.5	15.4	16.7	17.0
	3H	16.1	17.3	16.5	17.6	17.9	16.1	17.3	16.4	17.6	17.9
	4H	16.5	17.7	16.9	18.0	18.3	16.6	17.8	17.0	18.1	18.5
	6H	16.9	18.0	17.3	18.3	18.7	17.3	18.4	17.7	18.7	19.1
	8H	17.1	18.2	17.5	18.5	18.9	17.6	18.7	18.0	19.0	19.4
	12H	17.3	18.4	17.7	18.7	19.1	17.9	18.9	18.3	19.3	19.6
4H	2H	15.6	16.7	15.9	17.1	17.4	15.5	16.7	15.9	17.0	17.3
	3H	16.7	17.7	17.1	18.0	18.4	16.7	17.7	17.1	18.1	18.5
	4H	17.2	18.1	17.6	18.5	18.9	17.4	18.3	17.8	18.7	19.1
	6H	17.7	18.6	18.2	19.0	19.4	18.2	19.0	18.6	19.4	19.8
	8H	18.0	18.8	18.5	19.2	19.7	18.6	19.3	19.0	19.8	20.2
	12H	18.4	19.1	18.8	19.5	20.0	18.9	19.6	19.4	20.1	20.6
8H	4H	17.4	18.2	17.9	18.6	19.1	17.6	18.3	18.0	18.8	19.2
	6H	18.1	18.8	18.6	19.2	19.7	18.5	19.1	19.0	19.6	20.1
	8H	18.5	19.1	19.1	19.6	20.1	19.0	19.6	19.5	20.0	20.6
	12H	19.0	19.5	19.6	20.0	20.6	19.5	20.0	20.0	20.5	21.0
12H	4H	17.4	18.1	17.9	18.6	19.1	17.6	18.3	18.1	18.7	19.2
	6H	18.2	18.8	18.7	19.3	19.8	18.6	19.1	19.1	19.6	20.1
	8H	18.7	19.2	19.2	19.7	20.2	19.1	19.6	19.7	20.1	20.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H		+ 0.2 / - 0.2					+ 0.1 / - 0.2				
2.0H		+ 0.5 / - 0.4					+ 0.4 / - 0.3				

CIE Pub.117, 8065 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 7.3$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

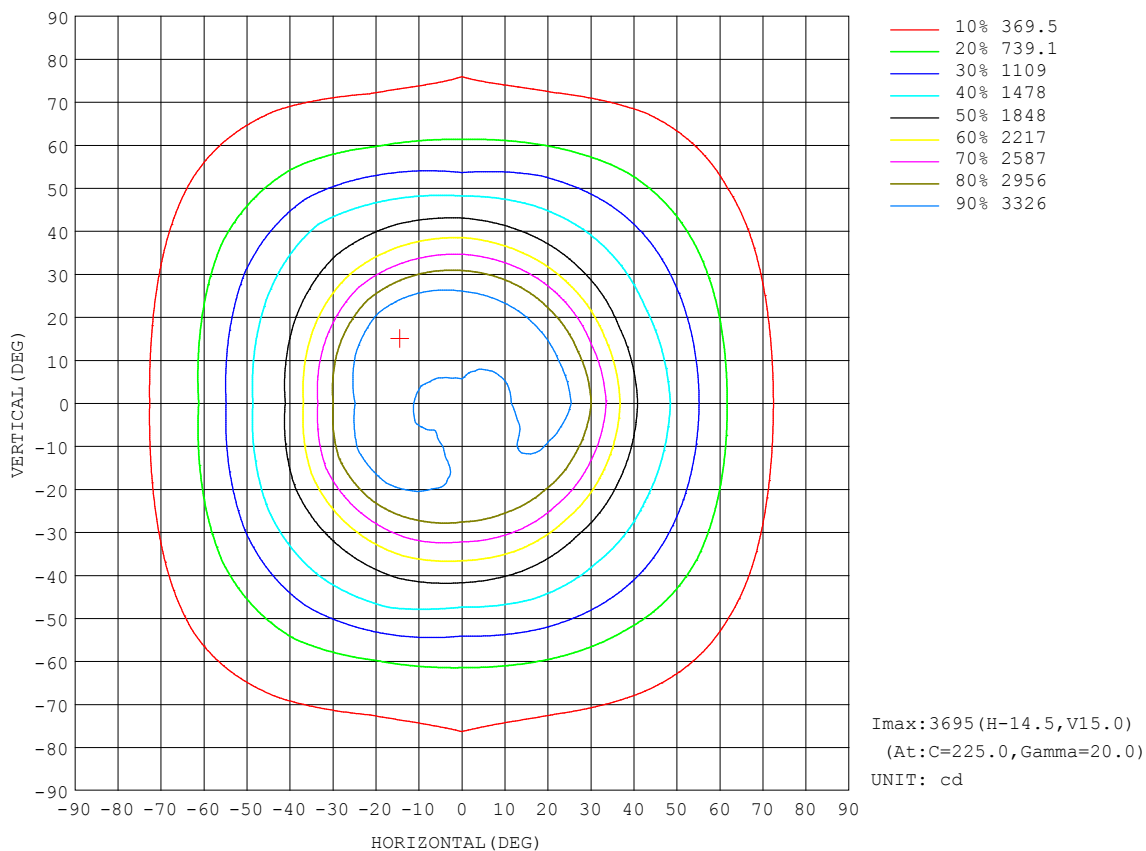
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	63	52	46	62	52	46	61	51	45	40
0.80	72	62	55	71	61	55	69	60	54	48
1.00	80	70	64	79	69	63	76	70	62	56
1.25	87	77	71	85	76	70	82	75	69	62
1.50	91	82	76	89	81	75	86	79	74	67
2.00	97	89	83	95	88	83	91	85	81	73
2.50	100	93	88	98	92	87	94	89	84	76
3.00	103	97	92	101	95	91	96	92	88	79
4.00	107	101	97	104	99	96	99	96	92	83
5.00	109	104	101	106	102	99	101	98	95	85
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:zcx
 Test Date:2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

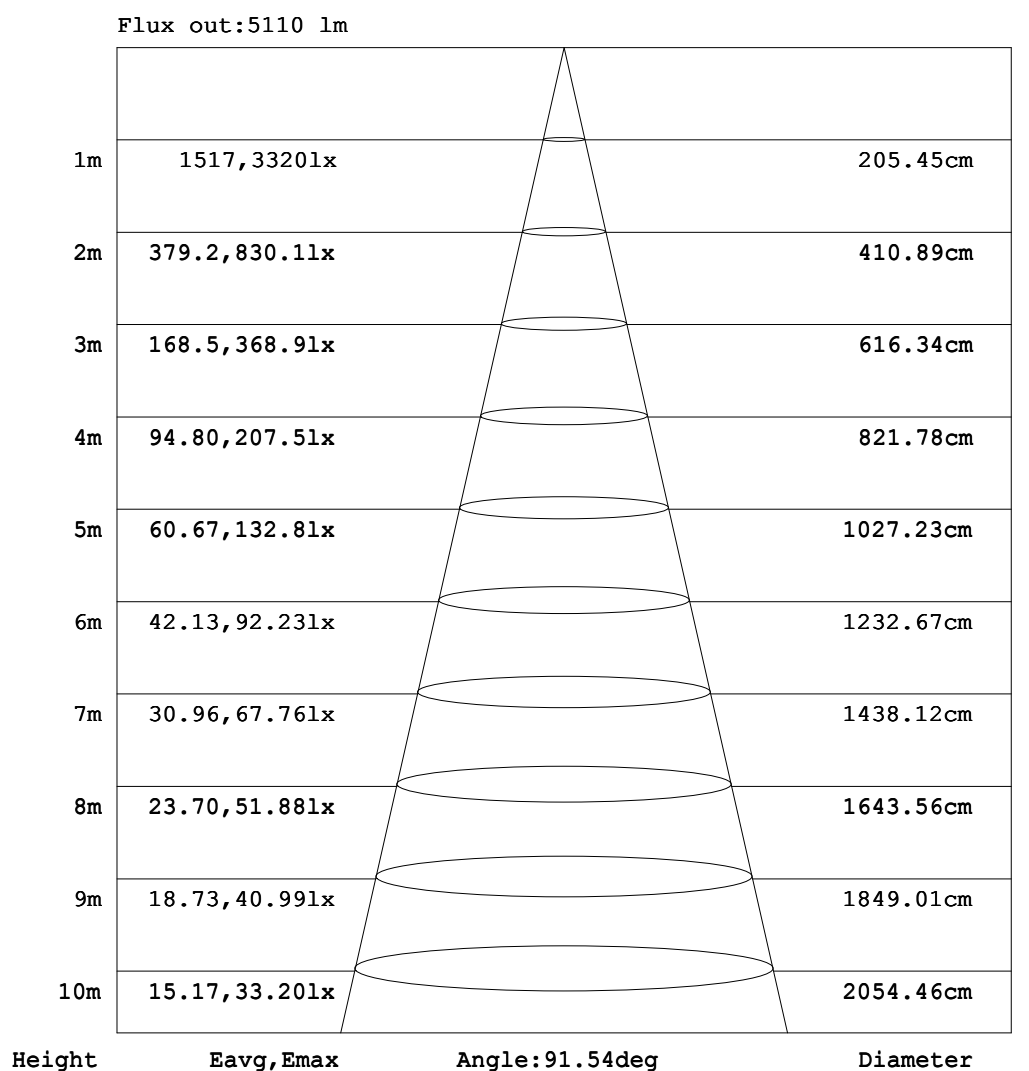


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zcx
Test Date:2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

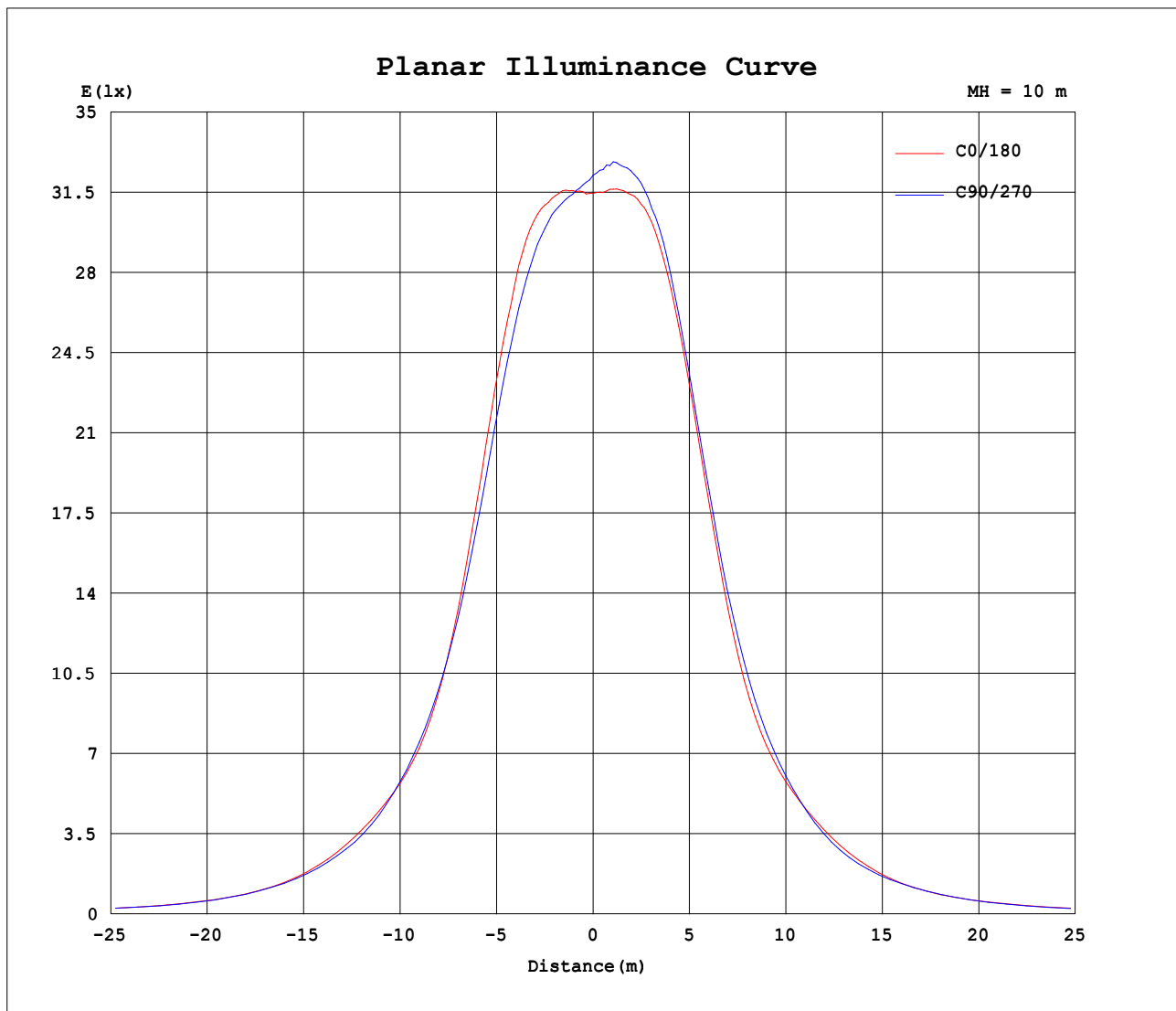


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-18

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: zcx
Test Date: 2020-06-18

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:227.43V I:0.2255A P:49.682W PF:0.9686 Freq:49.97Hz Lamp Flux:8065.27x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

Table--1

UNIT: cd

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	3145	3131	3139	3160	3225	3235	3172	3130	3145	3131	3139	3160	3225	3235	3172	3130			
5	3189	3160	3144	3145	3195	3259	3234	3180	3200	3199	3223	3274	3305	3269	3215	3177			
10	3294	3241	3231	3209	3233	3306	3345	3282	3296	3317	3393	3470	3410	3364	3319	3299			
15	3417	3332	3300	3277	3284	3368	3465	3401	3419	3468	3579	3608	3506	3472	3417	3406			
20	3482	3373	3288	3268	3265	3364	3476	3480	3450	3542	3696	3617	3535	3488	3466	3466			
25	3349	3205	3132	3097	3111	3209	3344	3395	3319	3437	3556	3470	3380	3338	3307	3298			
30	2963	2833	2758	2757	2778	2881	2996	3065	2950	3082	3177	3106	3031	2969	2905	2895			
35	2416	2330	2281	2328	2352	2449	2506	2556	2423	2543	2638	2592	2548	2461	2378	2344			
40	1912	1861	1844	1919	1967	2035	2041	2052	1927	2042	2123	2113	2085	1985	1897	1854			
45	1616	1566	1558	1621	1637	1725	1718	1720	1636	1725	1788	1766	1705	1652	1585	1569			
50	1408	1367	1364	1366	1321	1464	1489	1482	1407	1490	1551	1445	1338	1384	1382	1338			
55	1119	1096	1089	1089	1061	1155	1217	1192	1099	1208	1250	1131	1034	1110	1114	1105			
60	821	846	808	807	813	831	904	906	797	918	914	822	800	825	839	848			
65	602	607	615	621	585	614	674	656	594	664	671	610	578	616	640	602			
70	437	434	463	471	449	470	500	477	443	476	497	458	439	465	477	432			
75	310	310	326	335	385	337	351	342	312	336	347	325	378	331	334	307			
80	227	220	231	228	314	229	243	236	224	232	237	227	316	229	233	218			
85	161	154	159	142	179	142	162	165	161	161	163	140	189	141	160	152			
90	103	97.2	89.9	64.9	35.3	64.5	93.7	110	103	104	95.0	65.2	42.2	65.1	91.8	95.4			
95	71.9	70.6	63.7	40.5	14.9	43.6	62.0	74.5	71.9	73.6	60.3	40.5	12.7	39.1	61.1	71.0			
100	62.4	61.5	58.9	39.6	16.1	40.5	54.6	58.9	61.7	61.8	52.4	39.3	14.0	38.2	53.9	66.6			
105	87.8	88.7	75.1	39.3	17.5	41.6	78.1	94.6	90.6	91.2	71.4	37.9	14.7	35.3	71.5	90.6			
110	89.3	88.7	73.5	41.8	18.0	44.5	73.8	89.0	90.5	88.1	73.7	42.8	15.2	38.5	72.4	87.8			
115	78.4	75.6	61.2	34.1	17.7	37.8	61.7	74.5	78.4	73.8	60.9	35.2	15.5	31.0	55.4	74.5			
120	73.4	71.1	51.5	30.9	16.8	35.1	58.2	70.2	74.3	69.3	57.2	33.1	15.7	29.1	48.5	70.4			
125	69.8	67.3	48.9	28.4	16.5	32.8	55.1	65.8	69.3	65.1	54.4	31.3	16.0	27.2	46.8	67.3			
130	66.9	64.2	44.1	25.8	16.3	29.9	51.9	63.0	67.0	62.7	51.6	29.1	15.9	24.9	42.1	64.0			
135	63.1	58.9	39.5	23.1	16.2	26.4	46.9	59.0	63.1	58.5	46.8	26.0	16.1	22.6	38.1	58.4			
140	57.4	47.2	35.3	21.0	16.1	23.4	42.2	53.6	57.2	52.9	41.9	23.2	16.3	20.8	34.4	44.4			
145	51.6	39.2	30.4	19.4	16.2	20.8	36.7	47.7	51.5	46.9	36.5	20.8	16.5	19.5	29.4	36.3			
150	44.0	33.5	26.3	18.2	16.4	18.9	31.1	40.7	43.8	39.6	30.7	18.9	16.7	18.2	25.7	30.0			
155	36.0	28.9	23.3	17.5	16.7	17.7	26.0	33.8	36.4	32.7	25.6	17.8	17.0	17.5	22.6	27.5			
160	28.9	24.8	20.7	17.4	17.1	17.0	21.7	27.3	29.4	26.3	21.4	17.0	17.2	16.8	20.1	23.7			
165	23.4	21.1	18.8	17.6	17.5	17.3	19.0	21.8	23.5	21.2	18.7	17.2	17.5	17.3	18.3	20.3			
170	20.0	19.1	18.3	18.1	18.0	17.8	17.6	18.7	20.1	18.6	17.6	17.7	17.8	17.8	17.9	18.5			
175	19.6	19.0	18.6	18.5	18.4	18.3	18.3	18.4	19.6	18.5	18.3	18.2	18.3	18.3	18.4	18.6			
180	19.8	19.1	18.7	18.6	18.5	18.6	18.6	18.8	19.9	19.0	18.7	18.6	18.6	18.5	18.6	18.8			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-18

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: