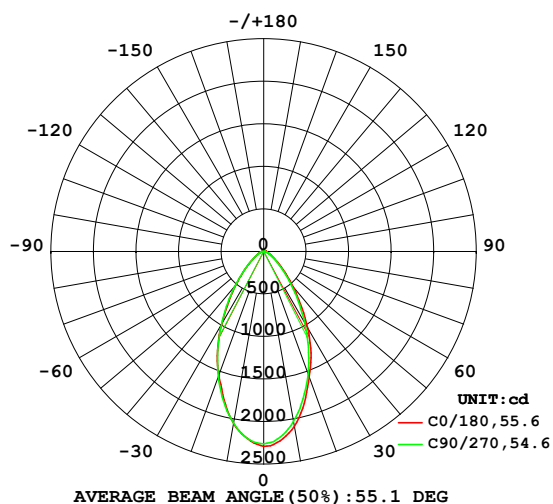


LUMINAIRE PHOTOMETRIC TEST REPORT

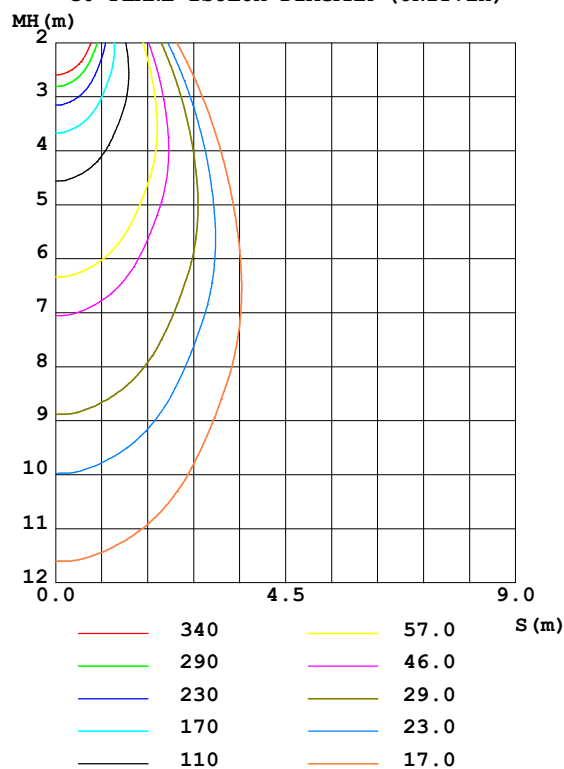
Test:U:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*60mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 163.14 lm/W			
MODEL	CTLS-0614-40NR-04WH	I _{max} (cd)	2291	S/MH (C0/180)	0.82
NOMINAL POWER (W)	14	LOR (%)	100.0	S/MH (C90/270)	0.82
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	2364.4	η UP, DN (C0-180)	1.1, 48.7
NOMINAL FLUX (lm)	2364.41	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.1, 49.2
LAMPS INSIDE	1	η up (%)	2.1	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	230.0	η down (%)	97.9	CIBSE SHR MAX	0.90

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: 2020-06-19

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:

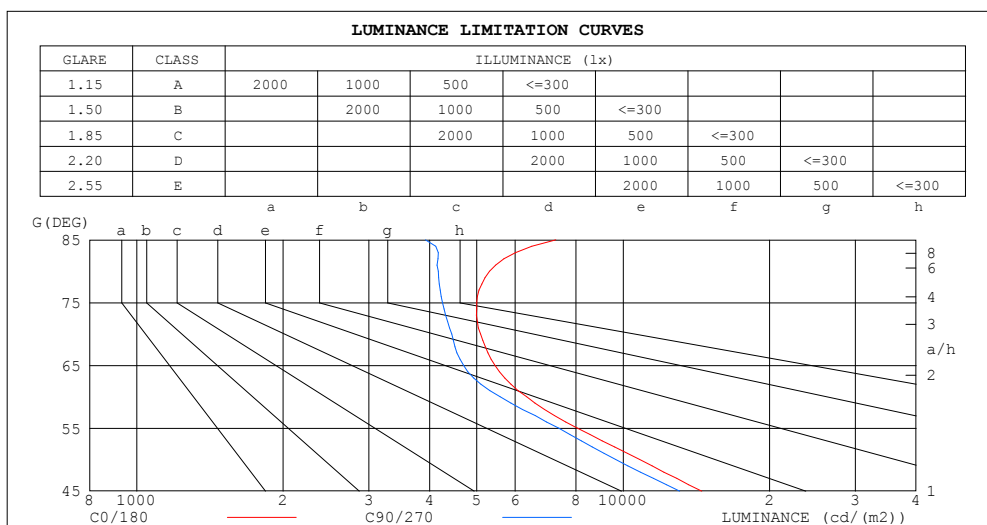
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2085	2049	2026	2020	2051	2056	2048	2050	0- 10	205.6	205.6	8.69,8.69
20	1569	1549	1530	1525	1549	1575	1562	1562	10- 20	505.8	711.4	30.1,30.1
30	1037	983.3	967.6	964.1	990.3	1028	999.6	1006	20- 30	583.1	1295	54.8,54.8
40	534.9	513.0	491.9	495.7	506.2	536.4	516.7	534.3	30- 40	460.5	1755	74.2,74.2
50	250.2	234.1	223.3	224.2	228.9	237.0	231.4	243.4	40- 50	274.3	2029	85.8,85.8
60	114.0	107.1	100.5	102.7	102.4	104.8	101.6	109.1	50- 60	142.7	2172	91.9,91.9
70	62.69	59.56	54.67	56.26	55.52	55.82	52.26	59.16	60- 70	77.24	2249	95.1,95.1
80	33.19	31.26	26.04	28.46	28.92	28.43	24.00	30.97	70- 80	44.92	2294	97,97
90	16.33	10.52	2.009	11.14	16.86	10.44	0.5722	10.08	80- 90	19.41	2314	97.9,97.9
100	15.15	10.33	0.3282	10.71	20.04	9.808	0.3577	9.489	90-100	10.60	2324	98.3,98.3
110	13.78	9.150	0.7808	9.099	14.28	8.987	0.7613	8.483	100-110	9.775	2334	98.7,98.7
120	10.30	7.196	1.641	7.379	10.99	7.083	1.535	6.062	110-120	7.158	2341	99,99
130	9.954	7.261	3.008	7.286	10.31	6.913	2.803	6.423	120-130	5.926	2347	99.3,99.3
140	9.979	7.624	4.786	7.411	9.804	6.987	4.479	6.782	130-140	5.378	2352	99.5,99.5
150	9.753	7.855	6.653	7.805	8.998	7.416	6.295	7.296	140-150	4.680	2357	99.7,99.7
160	9.668	8.690	8.374	8.694	9.099	8.310	8.028	8.319	150-160	3.759	2361	99.9,99.9
170	10.10	9.754	9.721	9.630	9.923	9.420	9.474	9.537	160-170	2.575	2363	100,100
180	10.82	10.36	10.36	10.37	10.84	10.36	10.36	10.37	170-180	0.9542	2364	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:2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*60mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7273	3921
80	5310	4165
75	4997	4250
70	5091	4440
65	5452	4698
60	6331	5582
55	8047	7368
50	10812	9648
45	14498	13060

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zcx
Test Date:2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*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	.220	.125	.040	.213	.121	.039	.199	.114	.036	.186	.107	.034	.174	.101	.033		
2.0	.209	.114	.035	.202	.111	.034	.190	.106	.033	.179	.101	.031	.169	.096	.030		
3.0	.197	.105	.031	.191	.102	.031	.181	.098	.030	.171	.094	.029	.162	.090	.028		
4.0	.185	.096	.028	.180	.094	.028	.171	.091	.027	.162	.087	.026	.154	.084	.026		
5.0	.174	.089	.026	.170	.087	.025	.162	.084	.025	.154	.081	.024	.147	.079	.024		
6.0	.165	.082	.024	.161	.081	.023	.153	.079	.023	.147	.076	.022	.140	.074	.022		
7.0	.156	.077	.022	.152	.076	.022	.146	.074	.021	.140	.072	.021	.134	.070	.020		
8.0	.148	.072	.020	.145	.071	.020	.139	.069	.020	.133	.067	.019	.128	.066	.019		
9.0	.140	.068	.019	.137	.067	.019	.132	.065	.019	.127	.064	.018	.122	.062	.018		
10.0	.133	.064	.018	.131	.063	.018	.126	.062	.017	.122	.060	.017	.117	.059	.017		

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	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022		
1.0	.191	.173	.158	.163	.149	.136	.112	.102	.094	.064	.059	.055	.021	.019	.018		
2.0	.178	.149	.125	.152	.128	.108	.104	.089	.075	.060	.052	.044	.019	.017	.014		
3.0	.167	.131	.101	.143	.113	.088	.098	.078	.062	.057	.046	.036	.018	.015	.012		
4.0	.158	.116	.085	.135	.101	.074	.093	.070	.052	.054	.041	.031	.017	.013	.010		
5.0	.150	.105	.072	.129	.091	.063	.089	.064	.044	.051	.037	.026	.017	.012	.009		
6.0	.143	.096	.063	.123	.083	.055	.085	.058	.039	.049	.034	.023	.016	.011	.008		
7.0	.136	.089	.056	.117	.077	.049	.081	.054	.035	.047	.032	.021	.015	.010	.007		
8.0	.130	.083	.051	.112	.072	.044	.078	.051	.031	.045	.030	.019	.015	.010	.006		
9.0	.125	.078	.046	.108	.068	.040	.075	.048	.029	.043	.028	.017	.014	.009	.006		
10.0	.120	.074	.043	.103	.064	.037	.072	.045	.026	.042	.027	.016	.014	.009	.005		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm										
NAME: LED Linear Lighting System					TYPE:			WEIGHT:2kg		
SPEC.:					DIM.: 600*60*45mm			SERIAL No.:		
MFR.: CoreShine					SUR.: 600*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	15.3	16.5	15.6	16.7	16.9	14.9	16.0	15.2	16.3	16.5
3H	15.8	16.8	16.1	17.1	17.3	15.4	16.4	15.7	16.6	16.9
4H	16.1	17.1	16.4	17.3	17.6	15.6	16.6	15.9	16.8	17.1
6H	16.4	17.3	16.7	17.6	17.9	15.8	16.7	16.1	17.0	17.3
8H	16.5	17.4	16.9	17.7	18.0	15.9	16.7	16.2	17.0	17.4
12H	16.7	17.5	17.0	17.8	18.2	15.9	16.8	16.3	17.1	17.4
4H 2H	15.4	16.4	15.7	16.6	16.9	15.1	16.0	15.4	16.3	16.6
3H	16.1	16.9	16.5	17.2	17.6	15.7	16.5	16.0	16.8	17.2
4H	16.5	17.3	16.9	17.6	18.0	16.0	16.8	16.4	17.1	17.5
6H	16.9	17.6	17.4	18.0	18.4	16.4	17.0	16.8	17.4	17.8
8H	17.2	17.8	17.6	18.2	18.6	16.5	17.1	16.9	17.5	17.9
12H	17.4	18.0	17.9	18.4	18.8	16.6	17.2	17.0	17.6	18.0
8H 4H	16.6	17.2	17.0	17.6	18.0	16.2	16.8	16.6	17.2	17.6
6H	17.2	17.7	17.7	18.2	18.6	16.6	17.2	17.1	17.6	18.0
8H	17.5	18.0	18.0	18.5	18.9	16.9	17.3	17.3	17.8	18.3
12H	17.9	18.3	18.4	18.8	19.3	17.0	17.4	17.6	17.9	18.4
12H 4H	16.6	17.2	17.1	17.6	18.0	16.2	16.7	16.6	17.2	17.6
6H	17.2	17.7	17.7	18.2	18.6	16.7	17.2	17.2	17.6	18.1
8H	17.6	18.0	18.1	18.5	19.0	17.0	17.4	17.5	17.8	18.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 0.9					+ 0.8 / - 1.0				
1.5H	+ 1.0 / - 0.7					+ 1.0 / - 0.8				
2.0H	+ 1.5 / - 0.8					+ 1.6 / - 1.0				

CIE Pub.117, 2364 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.0$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*60mm	Shielding Angle:

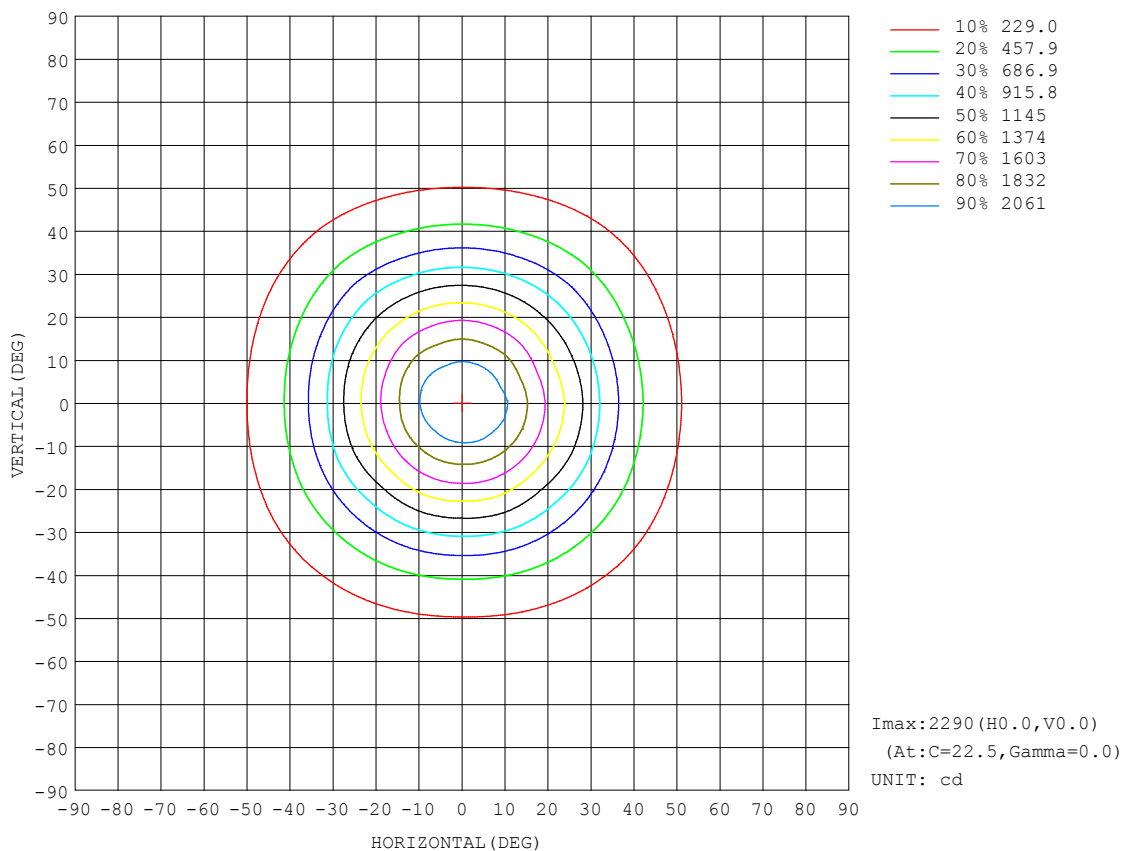
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	75	67	62	75	67	62	74	66	62	57
0.80	84	76	71	83	76	71	82	75	70	65
1.00	90	83	78	89	82	77	87	82	77	72
1.25	95	88	84	94	88	83	92	86	82	77
1.50	99	92	88	98	92	87	95	90	86	80
2.00	103	98	93	102	96	92	98	94	91	84
2.50	106	100	96	104	99	95	100	96	93	86
3.00	108	103	99	106	102	98	102	99	96	88
4.00	110	107	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	105	103	101	92
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:2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*60mm	Shielding Angle:

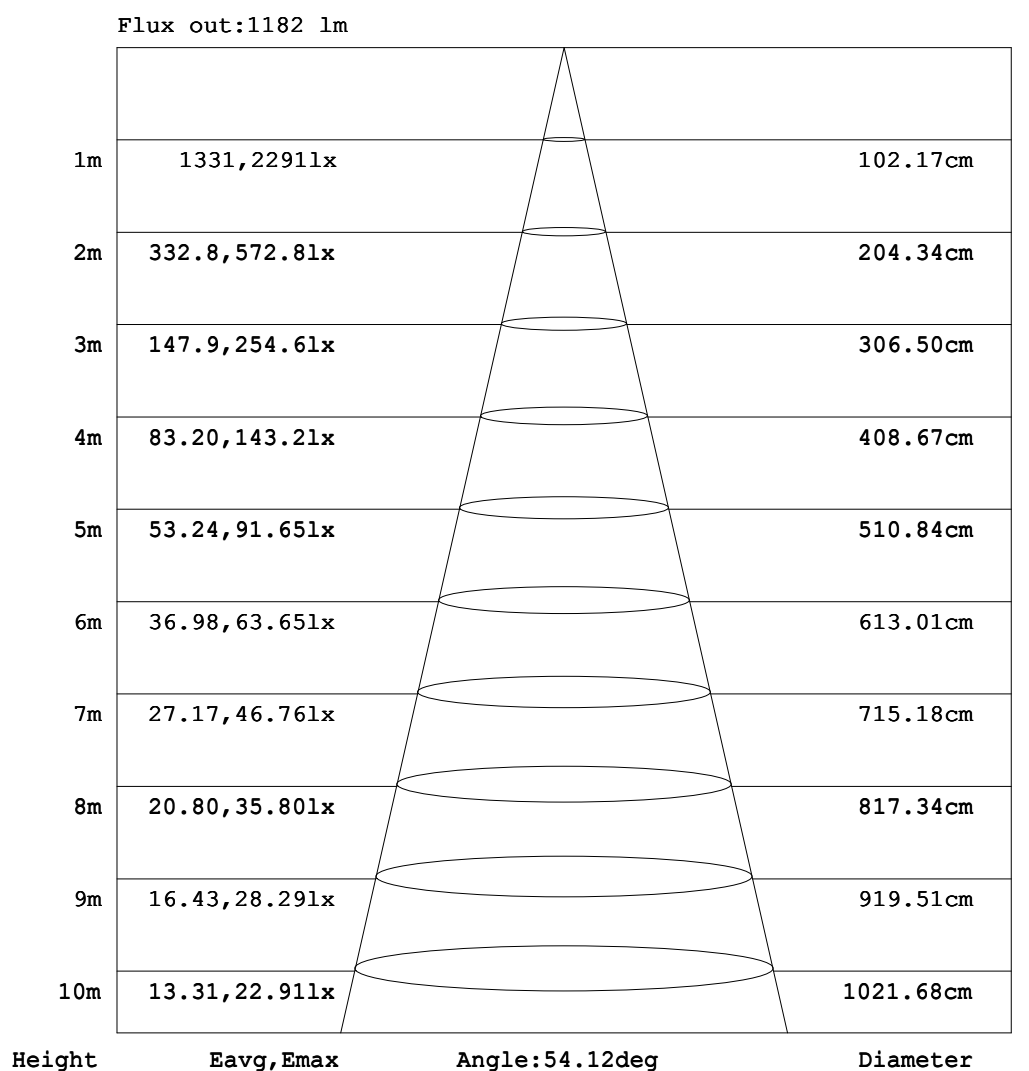


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zcx
Test Date:2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*60mm	Shielding Angle:

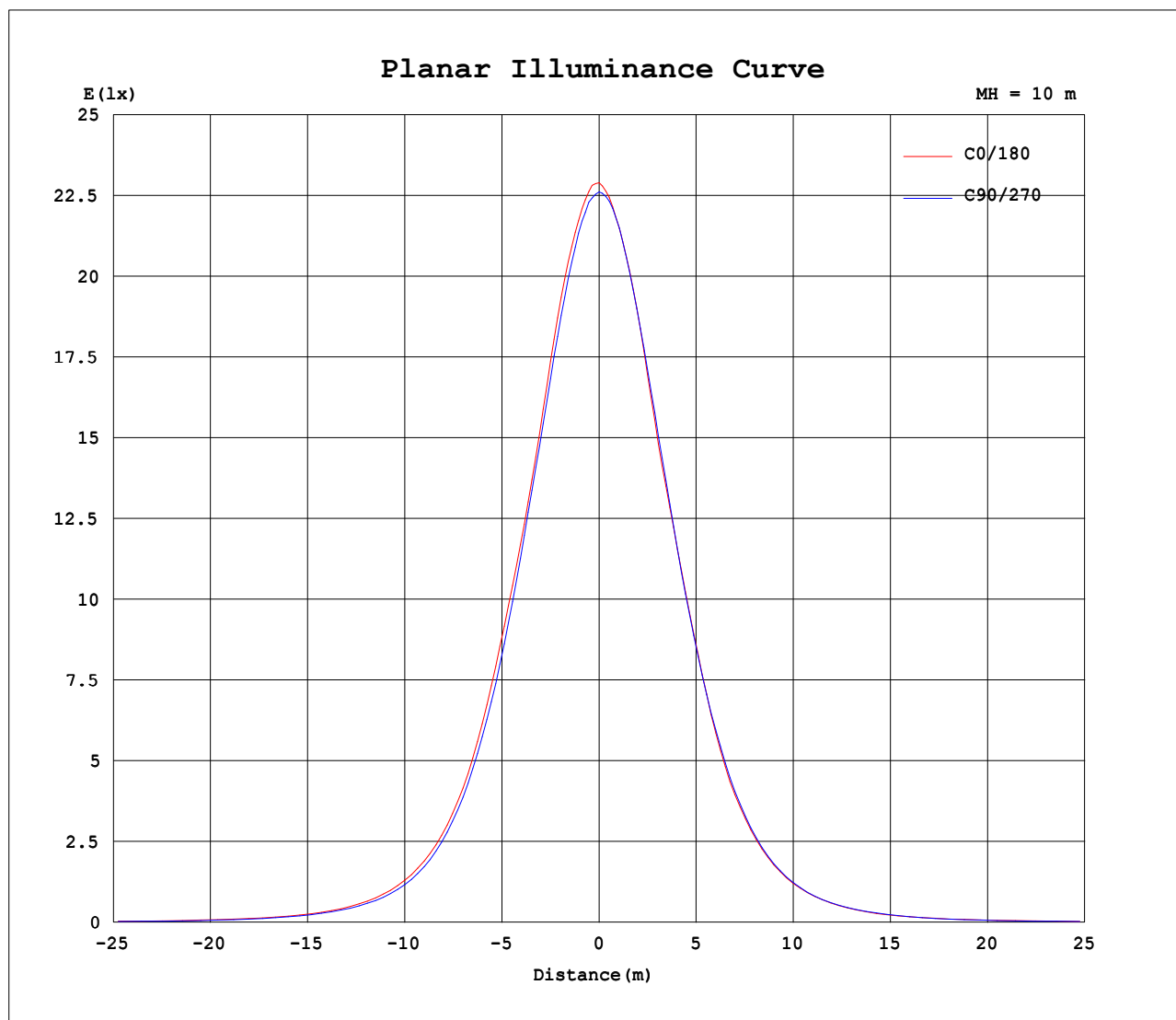


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-19

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: 2020-06-19

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:226.40V I:0.0692A P:14.494W PF:0.9257 Freq:49.98Hz Lamp Flux:2364.41x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 600*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:600*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	2290	2291	2278	2264	2262	2261	2263	2266	2290	2291	2278	2264	2262	2261	2263	2266			
5	2235	2233	2217	2206	2196	2194	2188	2194	2207	2219	2213	2197	2206	2208	2206	2202			
10	2085	2076	2049	2043	2026	2021	2020	2040	2051	2061	2056	2040	2048	2047	2050	2049			
15	1845	1844	1824	1806	1792	1794	1801	1804	1805	1828	1842	1817	1827	1818	1833	1815			
20	1569	1559	1549	1544	1530	1532	1525	1530	1549	1556	1575	1560	1562	1557	1562	1532			
25	1317	1296	1260	1264	1247	1254	1242	1277	1288	1301	1297	1287	1281	1278	1276	1279			
30	1037	1026	983	985	968	969	964	998	990	1017	1028	1008	1000	999	1006	1017			
35	758	751	732	723	706	712	711	721	719	739	767	743	738	740	754	748			
40	535	526	513	505	492	497	496	506	506	518	536	519	517	521	534	527			
45	369	359	347	343	332	338	335	343	343	349	360	351	348	353	363	360			
50	250	243	234	230	223	225	224	230	229	233	237	233	231	235	243	243			
55	166	166	155	151	152	148	148	156	149	156	154	152	156	154	160	166			
60	114	112	107	104	100	103	103	104	102	103	105	103	102	104	109	111			
65	82.9	80.3	79.9	77.6	71.5	75.9	75.7	74.9	74.2	74.2	76.2	75.2	69.4	75.7	80.3	79.3			
70	62.7	62.5	59.6	58.2	54.7	56.4	56.3	58.2	55.5	56.9	55.8	55.3	52.3	55.9	59.2	61.2			
75	46.6	47.4	44.9	41.7	39.6	40.2	42.0	43.1	41.2	41.9	41.5	38.8	37.5	39.8	44.4	46.1			
80	33.2	33.2	31.3	27.2	26.0	26.0	28.5	29.9	28.9	28.8	28.4	24.9	24.0	25.9	31.0	32.3			
85	22.8	21.6	18.7	14.7	12.3	13.6	16.6	20.1	20.8	19.4	16.6	12.9	11.0	13.8	18.7	21.0			
90	16.3	14.7	10.5	4.84	2.01	5.34	11.1	15.6	16.9	14.8	10.4	4.36	0.57	3.92	10.1	14.2			
95	15.9	13.3	11.0	6.11	0.25	6.57	12.3	15.2	18.1	15.1	11.7	5.80	0.34	4.60	10.1	13.1			
100	15.1	13.6	10.3	4.98	0.33	4.90	10.7	17.5	20.0	17.8	9.81	4.70	0.36	4.07	9.49	13.4			
105	14.6	13.7	10.0	4.21	0.51	3.96	11.7	17.0	18.1	16.7	11.1	3.94	0.52	3.55	9.22	13.4			
110	13.8	13.1	9.15	4.18	0.78	4.01	9.10	13.6	14.3	13.0	8.99	4.04	0.76	3.63	8.48	12.5			
115	11.3	10.6	7.70	3.73	1.16	3.66	7.86	11.3	12.0	10.8	7.68	3.55	1.10	3.32	6.56	10.1			
120	10.3	9.65	7.20	3.81	1.64	3.71	7.38	10.3	11.0	9.92	7.08	3.56	1.53	3.39	6.06	9.27			
125	9.92	9.23	7.09	4.03	2.27	3.88	7.25	9.88	10.6	9.46	6.88	3.63	2.11	3.62	6.30	8.81			
130	9.95	9.19	7.26	4.41	3.01	4.22	7.29	9.78	10.3	9.32	6.91	3.92	2.80	3.91	6.42	8.63			
135	10.0	9.33	7.43	4.85	3.85	4.70	7.43	9.58	10.1	9.12	7.03	4.39	3.61	4.37	6.61	8.73			
140	9.98	9.41	7.62	5.41	4.79	5.33	7.41	9.47	9.80	9.00	6.99	4.99	4.48	4.97	6.78	8.51			
145	9.87	9.57	7.62	6.07	5.71	6.04	7.51	9.38	9.64	8.88	7.13	5.70	5.38	5.66	6.93	8.57			
150	9.75	9.27	7.86	6.81	6.65	6.83	7.81	8.91	9.00	8.47	7.42	6.47	6.30	6.44	7.30	8.40			
155	9.57	9.26	8.25	7.61	7.55	7.63	8.22	8.97	8.95	8.52	7.82	7.25	7.17	7.24	7.79	8.45			
160	9.67	9.32	8.69	8.36	8.37	8.35	8.69	9.13	9.10	8.70	8.31	7.99	8.03	8.02	8.32	8.81			
165	9.78	9.56	9.21	9.09	9.11	9.07	9.18	9.36	9.42	9.03	8.87	8.75	8.80	8.78	8.94	9.22			
170	10.1	9.94	9.75	9.72	9.72	9.71	9.63	9.72	9.92	9.52	9.42	9.45	9.47	9.47	9.54	9.70			
175	10.5	10.3	10.2	10.2	10.2	10.1	10.1	10.1	10.5	10.1	10.0	10.0	10.0	10.0	10.1	10.2			
180	10.8	10.5	10.4	10.4	10.4	10.4	10.4	10.4	10.8	10.5	10.4	10.3	10.4	10.4	10.4	10.4			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-19

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: