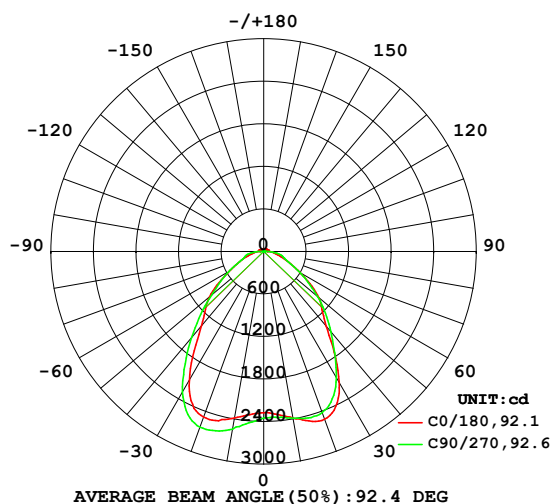


LUMINAIRE PHOTOMETRIC TEST REPORT

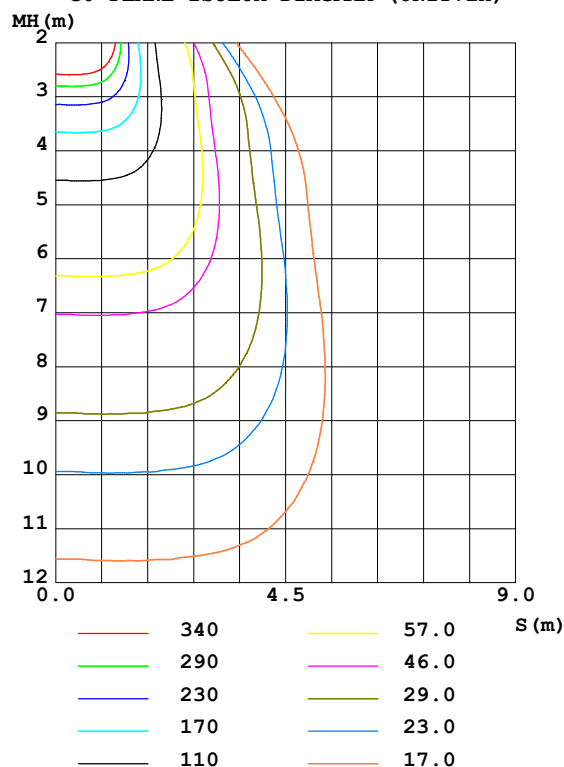
Test:U:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 169.12 lm/W			
MODEL	CTLS-1535-40WD-04WH	I _{max} (cd)	2695	S/MH (C0/180)	1.23
NOMINAL POWER (W)	35	LOR (%)	100.0	S/MH (C90/270)	1.28
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	5903.1	η UP, DN (C0-180)	1.8, 47.6
NOMINAL FLUX (lm)	5903.12	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.8, 48.8
LAMPS INSIDE	1	η up (%)	3.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230.0	η down (%)	96.4	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:

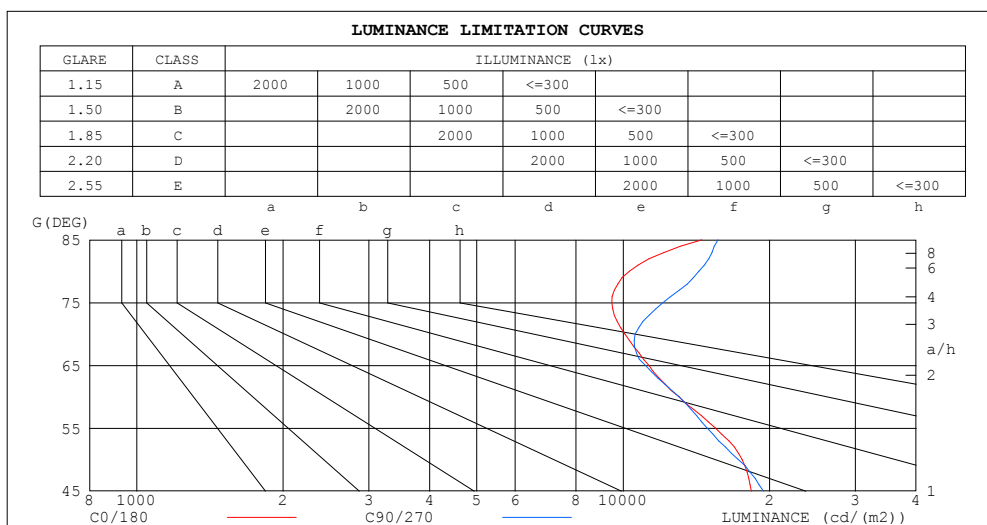
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2383	2361	2390	2487	2383	2454	2543	2480	0- 10	227.7	227.7	3.86,3.86
20	2519	2419	2415	2579	2485	2637	2636	2591	10- 20	712.9	940.6	15.9,15.9
30	2135	2017	2052	2211	2101	2311	2294	2200	20- 30	1109	2049	34.7,34.7
40	1374	1366	1478	1508	1363	1547	1582	1428	30- 40	1124	3174	53.8,53.8
50	1016	1015	997.7	1112	999.1	1117	965.8	1041	40- 50	952.2	4126	69.9,69.9
60	586.0	596.5	586.0	648.9	559.2	643.8	572.2	629.6	50- 60	733.2	4859	82.3,82.3
70	310.2	339.7	325.9	356.2	308.7	348.8	315.7	357.1	60- 70	450.4	5310	89.9,89.9
80	161.0	167.9	223.7	170.6	156.4	165.5	222.1	169.8	70- 80	257.6	5567	94.3,94.3
90	71.46	63.45	19.97	64.59	69.30	63.65	23.79	64.28	80- 90	121.8	5689	96.4,96.4
100	50.08	44.13	11.48	43.58	56.05	38.53	9.971	40.41	90-100	43.13	5732	97.1,97.1
110	64.20	52.47	12.71	52.79	64.16	51.61	10.84	51.57	100-110	48.92	5781	97.9,97.9
120	52.40	37.18	11.90	43.15	52.59	41.15	11.30	34.39	110-120	39.40	5820	98.6,98.6
130	47.60	32.08	11.76	38.34	47.31	36.89	11.46	30.22	120-130	30.82	5851	99.1,99.1
140	40.85	25.22	11.89	31.12	40.47	30.03	11.87	24.95	130-140	23.03	5874	99.5,99.5
150	30.77	19.18	12.29	22.89	31.02	22.04	12.46	19.09	140-150	14.87	5889	99.8,99.8
160	21.26	15.39	12.98	16.20	21.01	15.67	12.98	15.12	150-160	8.506	5898	99.9,99.9
170	14.91	13.76	13.62	13.39	14.83	13.29	13.56	13.62	160-170	4.189	5902	100,100
180	14.85	14.14	14.11	14.17	14.87	14.16	14.12	14.18	170-180	1.331	5903	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:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 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	14499	15669
80	10301	14316
75	9471	12077
70	10078	10587
65	11291	11107
60	13021	13021
55	15473	14887
50	17554	17245
45	18337	19430

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:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 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	.280	.159	.050	.272	.155	.049	.257	.147	.047	.243	.140	.045	.230	.133	.043		
2.0	.262	.144	.044	.255	.140	.043	.242	.134	.042	.229	.129	.040	.218	.123	.039		
3.0	.244	.130	.039	.237	.127	.038	.225	.122	.037	.215	.118	.036	.204	.113	.035		
4.0	.226	.118	.035	.221	.116	.034	.210	.112	.033	.201	.108	.032	.191	.104	.032		
5.0	.211	.107	.031	.206	.106	.031	.196	.102	.030	.188	.099	.029	.180	.096	.029		
6.0	.197	.099	.028	.192	.097	.028	.184	.094	.027	.176	.092	.027	.169	.089	.026		
7.0	.184	.091	.026	.180	.090	.026	.173	.087	.025	.166	.085	.025	.159	.083	.024		
8.0	.173	.085	.024	.170	.083	.024	.163	.081	.023	.156	.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	.145	.071	.020	.140	.070	.020	.135	.068	.019		

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	.218	.218	.218	.186	.186	.186	.127	.127	.127	.073	.073	.073	.023	.023	.023		
1.0	.206	.184	.165	.176	.158	.142	.121	.109	.098	.069	.063	.057	.022	.020	.018		
2.0	.196	.160	.130	.168	.138	.112	.115	.095	.078	.066	.055	.046	.021	.018	.015		
3.0	.188	.142	.106	.161	.123	.092	.110	.085	.065	.064	.050	.038	.020	.016	.012		
4.0	.180	.129	.090	.154	.111	.078	.106	.078	.055	.061	.045	.033	.020	.015	.011		
5.0	.172	.118	.079	.148	.102	.068	.102	.071	.048	.059	.042	.029	.019	.014	.009		
6.0	.165	.110	.070	.142	.095	.061	.098	.067	.043	.057	.039	.026	.018	.013	.008		
7.0	.159	.103	.064	.136	.089	.056	.094	.062	.039	.055	.037	.023	.018	.012	.008		
8.0	.152	.097	.059	.131	.084	.051	.091	.059	.036	.053	.035	.022	.017	.011	.007		
9.0	.147	.092	.055	.126	.080	.048	.088	.056	.034	.051	.033	.020	.017	.011	.007		
10.0	.141	.088	.052	.122	.076	.046	.085	.054	.032	.049	.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:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 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		15.1	16.5	15.4	16.7	17.0	15.2	16.6	15.5	16.8	17.1
	3H	16.0	17.3	16.4	17.5	17.8	16.1	17.4	16.5	17.7	18.0
	4H	16.4	17.6	16.8	17.9	18.2	16.7	17.8	17.0	18.2	18.5
	6H	16.8	17.9	17.1	18.2	18.5	17.3	18.4	17.7	18.7	19.1
	8H	17.0	18.0	17.4	18.4	18.7	17.6	18.7	18.0	19.0	19.4
	12H	17.2	18.2	17.6	18.6	18.9	17.8	18.9	18.2	19.2	19.6
4H	2H	15.5	16.7	15.9	17.0	17.3	15.6	16.8	15.9	17.1	17.4
	3H	16.6	17.6	17.0	18.0	18.3	16.7	17.8	17.1	18.1	18.5
	4H	17.1	18.0	17.5	18.4	18.8	17.4	18.3	17.8	18.7	19.1
	6H	17.6	18.5	18.1	18.9	19.3	18.1	19.0	18.6	19.4	19.8
	8H	17.9	18.7	18.4	19.1	19.6	18.5	19.3	19.0	19.7	20.2
	12H	18.2	18.9	18.7	19.4	19.9	18.8	19.6	19.3	20.0	20.5
8H	4H	17.3	18.1	17.8	18.5	19.0	17.6	18.3	18.0	18.8	19.2
	6H	18.0	18.7	18.5	19.1	19.6	18.5	19.1	19.0	19.6	20.1
	8H	18.4	19.0	19.0	19.5	20.0	18.9	19.5	19.5	20.0	20.5
	12H	18.9	19.4	19.5	19.9	20.5	19.4	19.9	19.9	20.4	21.0
12H	4H	17.3	18.0	17.8	18.5	19.0	17.6	18.3	18.1	18.7	19.2
	6H	18.1	18.7	18.6	19.2	19.7	18.5	19.1	19.1	19.6	20.1
	8H	18.6	19.1	19.1	19.6	20.1	19.1	19.6	19.6	20.1	20.6
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
2.0H		+ 0.5 / - 0.4					+ 0.4 / - 0.4				

CIE Pub.117, 5903 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.2$)

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:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

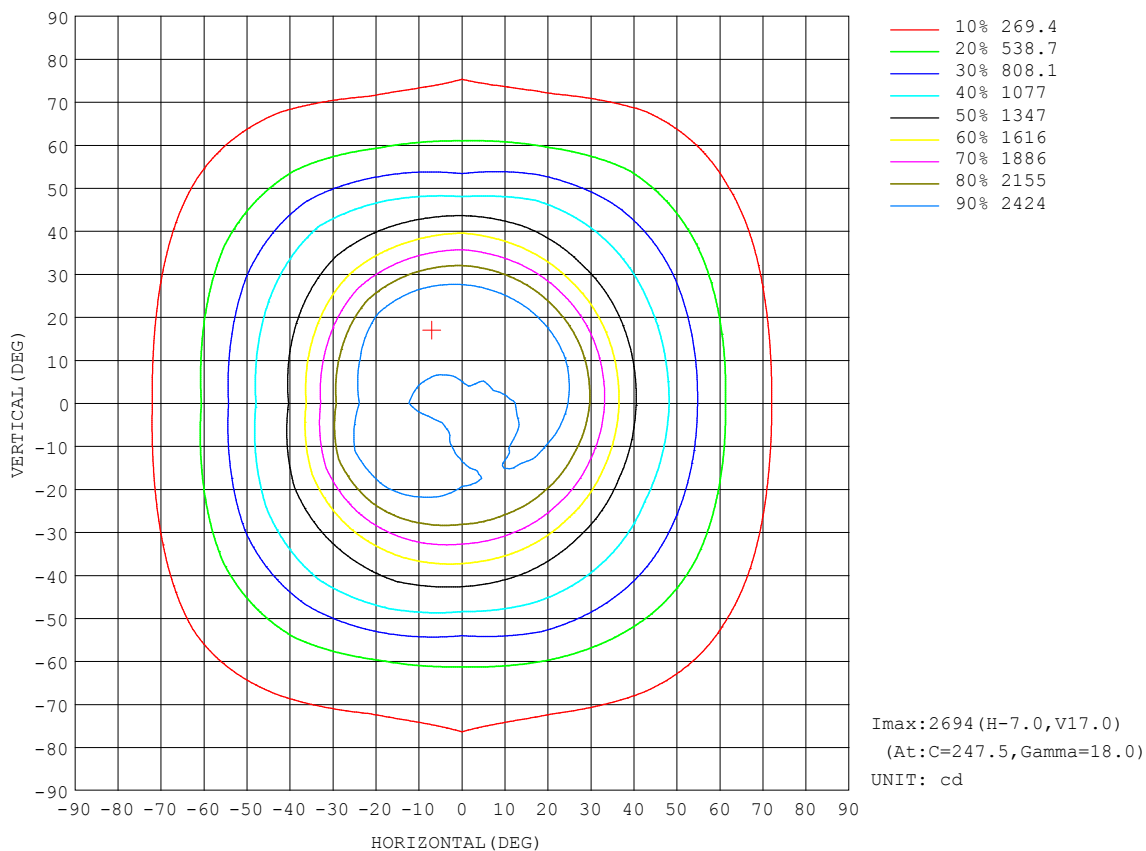
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	63	52	46	62	52	46	61	51	46	40
0.80	72	62	55	71	62	55	69	61	55	48
1.00	80	70	64	79	70	63	77	70	63	56
1.25	87	77	71	85	77	71	82	75	70	63
1.50	91	82	76	89	81	76	86	79	74	67
2.00	97	89	84	95	88	83	91	86	81	73
2.50	100	93	88	98	92	87	94	89	85	76
3.00	103	97	92	101	95	91	97	92	88	79
4.00	107	102	97	104	100	96	100	96	93	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:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:

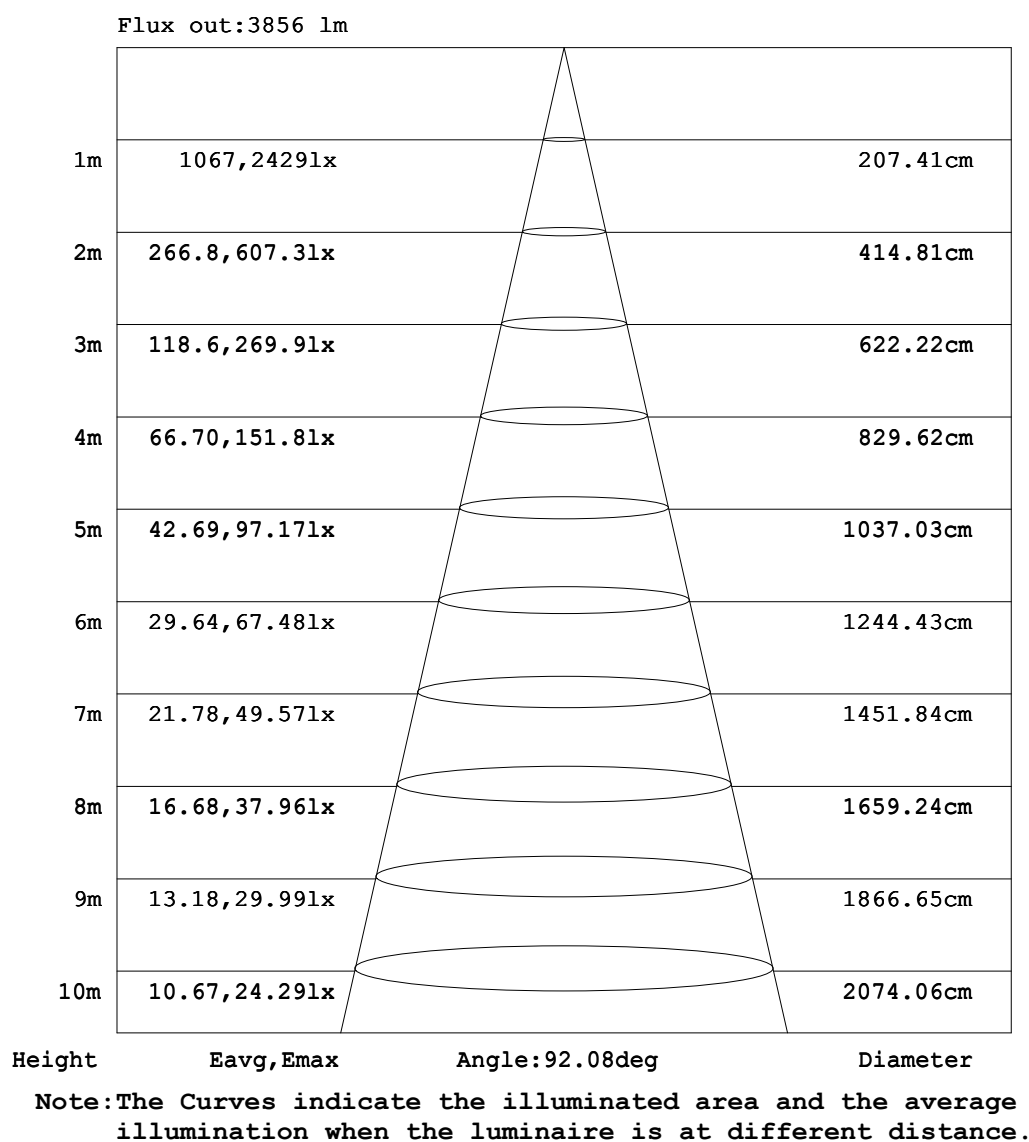


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zcx
 Test Date:2020-06-18

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

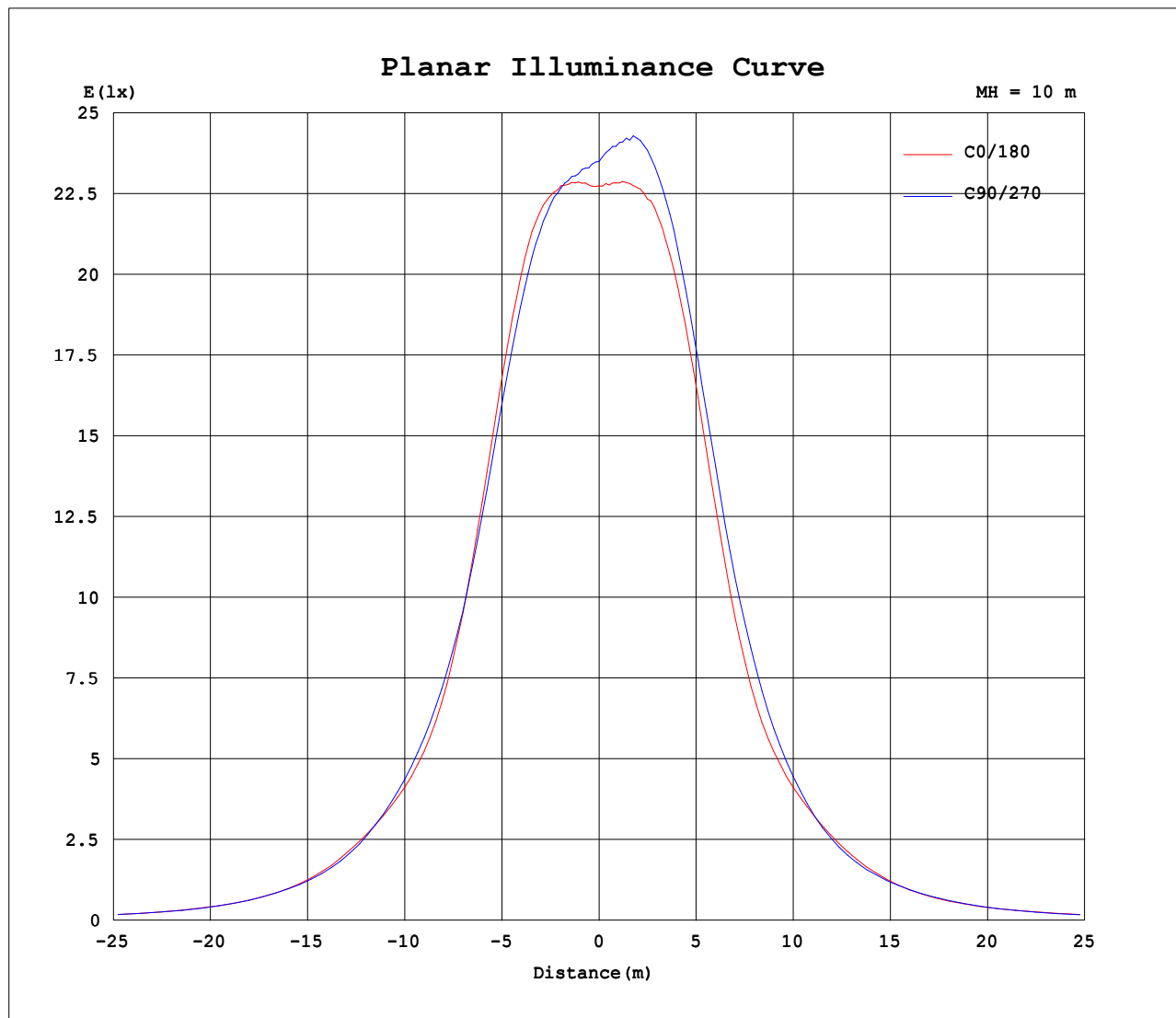
Test:U:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:2kg
SPEC.:	DIM.: 1500*60*45mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*60mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
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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:225.57V I:0.1625A P:34.904W PF:0.9521 Freq:50.00Hz Lamp Flux:5903.12x1 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	2274	2270	2290	2310	2350	2385	2371	2341	2274	2270	2290	2310	2350	2385	2371	2341			
5	2309	2302	2298	2308	2352	2404	2409	2379	2310	2325	2346	2379	2424	2441	2400	2380			
10	2383	2367	2361	2361	2390	2442	2487	2458	2383	2405	2454	2507	2543	2510	2480	2463			
15	2475	2439	2423	2408	2430	2493	2574	2553	2472	2500	2567	2658	2619	2594	2557	2543			
20	2519	2455	2419	2407	2415	2492	2579	2599	2485	2539	2637	2688	2636	2620	2591	2593			
25	2410	2334	2289	2278	2294	2373	2474	2514	2379	2453	2571	2573	2537	2505	2487	2475			
30	2135	2056	2017	2025	2052	2131	2211	2246	2101	2188	2311	2308	2294	2245	2200	2179			
35	1734	1681	1669	1707	1747	1809	1846	1859	1711	1807	1916	1926	1934	1865	1799	1770			
40	1374	1345	1366	1423	1478	1518	1508	1492	1363	1454	1547	1562	1582	1513	1428	1405			
45	1167	1140	1161	1213	1236	1293	1279	1263	1166	1238	1297	1280	1259	1262	1199	1187			
50	1016	993	1015	1026	998	1076	1112	1090	999	1063	1117	1052	966	1052	1041	1010			
55	799	795	805	821	768	834	887	870	774	853	886	808	745	814	836	823			
60	586	612	596	604	586	599	649	657	559	642	644	582	572	592	630	630			
65	429	438	454	450	422	443	485	477	418	462	474	433	411	443	481	447			
70	310	313	340	340	326	339	356	346	309	332	349	324	316	333	357	320			
75	221	223	239	240	281	240	249	246	217	233	243	228	272	236	248	227			
80	161	158	168	163	224	162	171	170	156	162	166	158	222	162	170	160			
85	114	110	115	99.6	123	98.4	113	118	112	112	113	95.8	128	98.7	115	111			
90	71.5	68.6	63.4	44.1	20.0	43.4	64.6	76.7	69.3	70.3	63.6	42.7	23.8	43.9	64.3	69.3			
95	51.1	50.7	46.5	28.7	10.3	30.6	46.7	55.2	49.5	51.4	43.9	28.4	9.06	27.9	44.9	52.3			
100	50.1	48.0	44.1	28.0	11.5	28.4	43.6	52.1	56.1	53.2	38.5	27.0	9.97	27.0	40.4	54.1			
105	64.6	65.0	55.3	28.1	12.3	30.6	59.4	72.1	68.0	69.0	53.2	27.1	10.4	25.8	53.4	68.3			
110	64.2	63.3	52.5	29.3	12.7	31.6	52.8	65.4	64.2	62.5	51.6	29.7	10.8	27.3	51.6	64.4			
115	55.7	53.6	42.4	24.2	12.4	27.1	45.6	54.7	55.2	52.4	43.6	24.8	11.0	22.3	40.0	54.6			
120	52.4	50.5	37.2	22.2	11.9	25.2	43.2	51.8	52.6	49.4	41.1	23.4	11.3	20.9	34.4	51.5			
125	49.7	47.7	35.0	20.4	11.8	23.6	40.9	48.8	49.0	46.6	39.1	22.1	11.4	19.4	33.4	49.2			
130	47.6	45.5	32.1	18.7	11.8	21.7	38.3	46.6	47.3	44.8	36.9	20.5	11.5	17.8	30.2	46.8			
135	44.9	42.1	28.4	16.8	11.8	19.3	34.7	43.4	44.5	41.8	33.5	18.5	11.6	16.3	27.4	42.2			
140	40.9	34.2	25.2	15.5	11.9	17.3	31.1	39.5	40.5	37.7	30.0	16.7	11.9	15.3	24.9	32.3			
145	36.4	28.4	21.9	14.4	12.1	15.5	27.1	35.1	36.3	33.4	26.2	15.1	12.1	14.4	21.6	26.5			
150	30.8	24.1	19.2	13.6	12.3	14.1	22.9	29.8	31.0	28.3	22.0	13.9	12.5	13.6	19.1	22.1			
155	25.6	21.0	17.1	13.1	12.6	13.3	19.2	24.8	25.9	23.5	18.5	13.2	12.8	13.1	17.0	20.4			
160	21.3	18.1	15.4	12.9	13.0	12.8	16.2	20.1	21.0	19.1	15.7	12.7	13.0	12.8	15.1	17.7			
165	17.2	15.6	14.1	13.2	13.3	13.1	14.2	16.3	17.1	15.6	13.9	13.0	13.2	13.2	13.9	15.3			
170	14.9	14.3	13.8	13.6	13.6	13.5	13.4	14.1	14.8	13.8	13.3	13.4	13.6	13.6	13.6	14.1			
175	14.6	14.2	14.0	14.0	13.9	13.9	13.9	14.0	14.6	13.9	13.8	13.8	13.9	13.9	14.0	14.2			
180	14.9	14.3	14.1	14.1	14.1	14.1	14.2	14.3	14.9	14.3	14.2	14.1	14.1	14.1	14.2	14.3			

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: