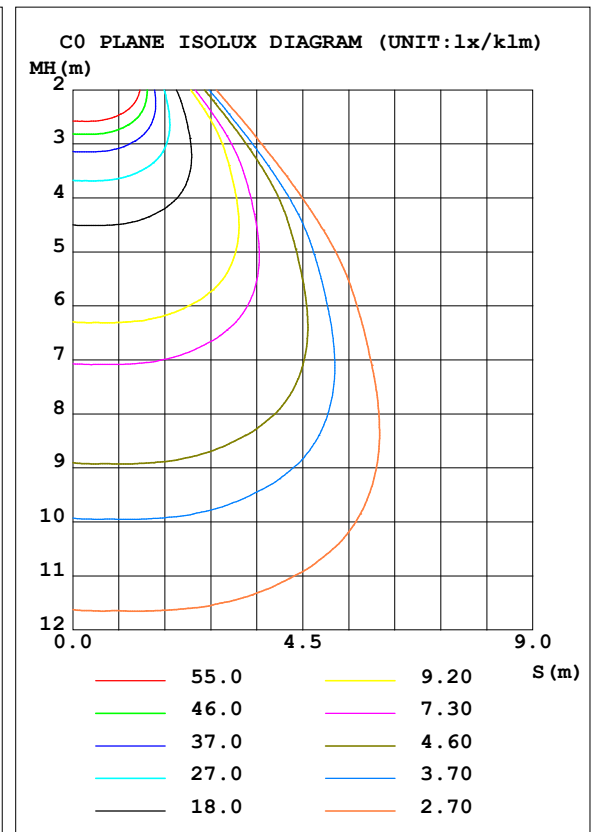
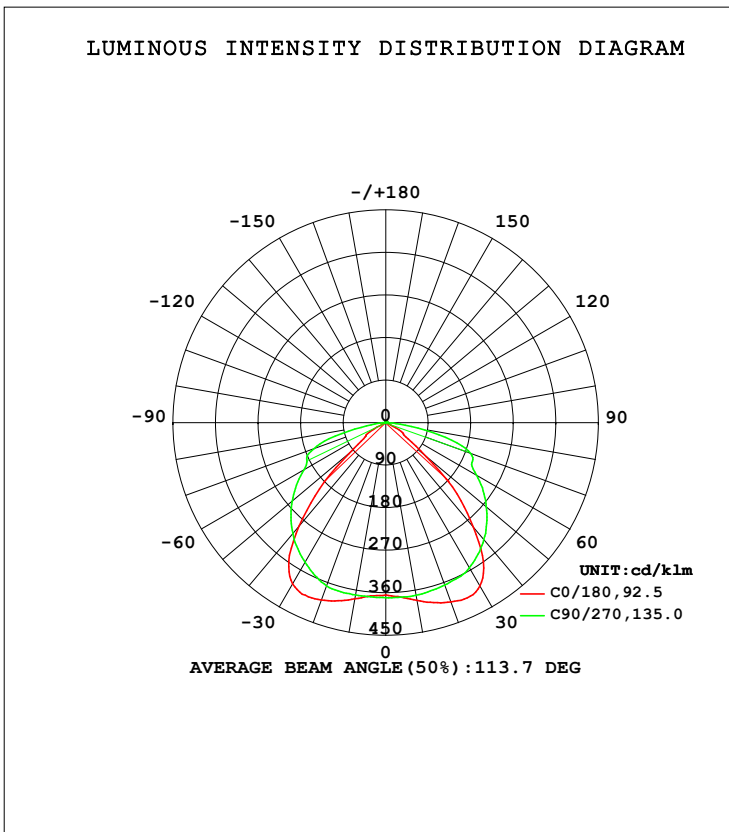


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 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: 162.77 lm/W
MODEL	CFLS-1570-40WD-05WH	I _{max} (cd/klm)	419.3	S/MH (C0/180)	1.32	
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.36	
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	0.6, 50.9	
NOMINAL FLUX (lm)	11503.3	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.5, 48.0	
LAMPS INSIDE	1	η up (%)	1.1	CIBSE SHR NOM	1.00	
TEST VOLTAGE (V)	230.0	η down (%)	98.9	CIBSE SHR MAX	1.05	



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:

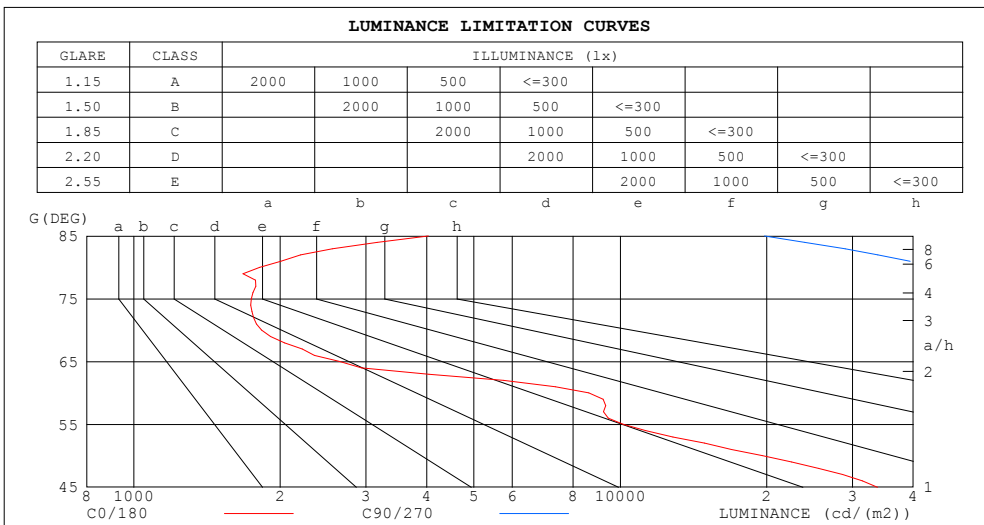
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	381.7	370.9	370.8	378.6	378.3	370.8	370.0	376.0	0- 10	35.40	35.40	3.54,3.54
20	403.5	386.0	365.7	397.7	399.4	387.2	367.9	389.3	10- 20	108.1	143.5	14.3,14.3
30	399.0	401.4	354.5	414.2	393.9	403.1	341.4	402.0	20- 30	180.4	323.9	32.4,32.4
40	287.9	393.0	323.1	407.2	285.5	391.7	306.3	385.7	30- 40	234.4	558.3	55.8,55.8
50	112.7	223.9	278.1	229.8	103.3	187.2	258.4	192.9	40- 50	227.8	786.1	78.6,78.6
60	38.54	29.31	221.8	31.14	38.90	27.12	200.7	23.51	50- 60	136.1	922.2	92.2,92.2
70	5.606	8.771	191.1	8.784	5.708	7.281	162.5	7.028	60- 70	39.40	961.6	96.2,96.2
80	2.820	6.323	69.56	6.647	2.741	5.978	41.87	5.639	70- 80	21.77	983.4	98.3,98.3
90	2.594	2.658	1.944	2.636	2.463	1.862	1.071	1.802	80- 90	5.584	989.0	98.9,98.9
100	1.184	1.413	1.709	1.326	1.134	1.173	1.503	1.245	90-100	1.630	990.6	99.1,99.1
110	1.047	1.545	1.848	1.456	0.9791	1.338	1.758	1.436	100-110	1.354	991.9	99.2,99.2
120	1.363	1.707	2.154	1.673	1.266	1.610	1.912	1.589	110-120	1.498	993.4	99.3,99.3
130	1.726	1.819	2.437	1.944	1.640	1.899	2.212	1.732	120-130	1.610	995.1	99.5,99.5
140	2.017	1.899	2.444	2.101	1.930	2.060	2.435	1.832	130-140	1.552	996.6	99.7,99.7
150	2.139	2.118	2.591	2.168	2.063	2.123	2.600	2.100	140-150	1.341	998.0	99.8,99.8
160	2.381	2.455	2.568	2.313	2.332	2.331	2.620	2.461	150-160	1.069	999.0	99.9,99.9
170	2.762	2.683	2.662	2.589	2.746	2.601	2.682	2.686	160-170	0.7199	999.7	100,100
180	2.915	2.749	2.735	2.747	2.928	2.757	2.741	2.748	170-180	0.2592	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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 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	4030	19794
80	1814	44737
75	1745	62280
70	1831	62415
65	2651	53183
60	8609	49535
55	10128	48993
50	19583	48320
45	33781	47726

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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 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	.249	.142	.045	.242	.138	.044	.229	.131	.042	.216	.125	.040	.205	.119	.038	
2.0	.242	.133	.041	.236	.130	.040	.224	.125	.039	.213	.120	.037	.203	.115	.036	
3.0	.231	.123	.037	.225	.120	.036	.215	.116	.035	.205	.112	.034	.196	.109	.034	
4.0	.218	.113	.033	.213	.111	.033	.204	.108	.032	.195	.105	.032	.187	.102	.031	
5.0	.205	.105	.030	.201	.103	.030	.193	.100	.030	.185	.098	.029	.178	.095	.029	
6.0	.194	.097	.028	.190	.096	.028	.182	.094	.027	.176	.091	.027	.169	.089	.026	
7.0	.183	.090	.026	.179	.089	.025	.173	.087	.025	.166	.085	.025	.161	.083	.025	
8.0	.173	.084	.024	.170	.083	.024	.164	.082	.023	.158	.080	.023	.153	.078	.023	
9.0	.163	.079	.022	.160	.078	.022	.155	.077	.022	.150	.075	.022	.145	.074	.021	
10.0	.155	.074	.021	.152	.074	.021	.147	.072	.020	.143	.071	.020	.138	.070	.020	

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	.199	.199	.199	.170	.170	.170	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.185	.165	.148	.158	.142	.127	.108	.098	.088	.062	.056	.051	.020	.018	.017	
2.0	.174	.141	.113	.149	.121	.097	.102	.084	.068	.059	.049	.040	.019	.016	.013	
3.0	.165	.123	.088	.142	.106	.077	.097	.073	.054	.056	.043	.032	.018	.014	.010	
4.0	.158	.109	.072	.135	.094	.062	.093	.066	.044	.054	.038	.026	.017	.013	.009	
5.0	.151	.098	.060	.129	.085	.052	.089	.059	.037	.052	.035	.022	.017	.011	.007	
6.0	.144	.090	.051	.124	.078	.044	.085	.054	.031	.050	.032	.019	.016	.010	.006	
7.0	.138	.083	.044	.119	.072	.038	.082	.050	.027	.048	.030	.016	.015	.010	.005	
8.0	.132	.077	.039	.114	.067	.034	.079	.047	.024	.046	.028	.014	.015	.009	.005	
9.0	.127	.072	.035	.109	.063	.031	.076	.044	.022	.044	.026	.013	.014	.009	.004	
10.0	.122	.068	.032	.105	.059	.028	.073	.042	.020	.042	.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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 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	13.4	14.7	13.7	14.9	15.2	18.8	20.1	19.0	20.3	20.5
3H	13.2	14.4	13.5	14.7	14.9	19.9	21.1	20.2	21.3	21.6
4H	13.1	14.3	13.4	14.5	14.8	20.7	21.9	21.0	22.1	22.4
6H	13.0	14.1	13.4	14.4	14.7	21.3	22.4	21.6	22.7	23.0
8H	13.0	14.0	13.3	14.3	14.6	21.4	22.5	21.8	22.7	23.0
12H	13.0	14.0	13.3	14.3	14.6	21.4	22.4	21.8	22.7	23.0
4H 2H	13.6	14.8	13.9	15.1	15.3	18.5	19.6	18.8	19.9	20.2
3H	13.5	14.5	13.8	14.8	15.1	19.6	20.6	19.9	20.9	21.2
4H	13.4	14.3	13.8	14.6	15.0	20.5	21.4	20.8	21.7	22.0
6H	13.3	14.1	13.7	14.5	14.9	21.1	21.9	21.5	22.3	22.7
8H	13.3	14.0	13.7	14.4	14.8	21.3	22.0	21.7	22.4	22.8
12H	13.3	13.9	13.7	14.3	14.8	21.3	22.0	21.8	22.4	22.8
8H 4H	13.3	14.0	13.7	14.4	14.8	20.3	21.1	20.7	21.4	21.8
6H	13.2	13.8	13.7	14.3	14.7	21.0	21.6	21.5	22.0	22.5
8H	13.2	13.7	13.7	14.2	14.7	21.2	21.7	21.6	22.1	22.6
12H	13.2	13.7	13.7	14.1	14.6	21.2	21.7	21.7	22.1	22.6
12H 4H	13.3	13.9	13.7	14.3	14.7	20.3	20.9	20.7	21.3	21.8
6H	13.2	13.7	13.7	14.2	14.7	21.0	21.5	21.4	21.9	22.4
8H	13.2	13.7	13.7	14.1	14.6	21.1	21.6	21.6	22.0	22.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.2 / - 6.0					+ 0.6 / - 0.5				
1.5H	+ 2.1 / - 4.7					+ 1.0 / - 1.8				
2.0H	+ 4.3 / - 5.3					+ 2.2 / - 4.9				

CIE Pub.117, 11503 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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

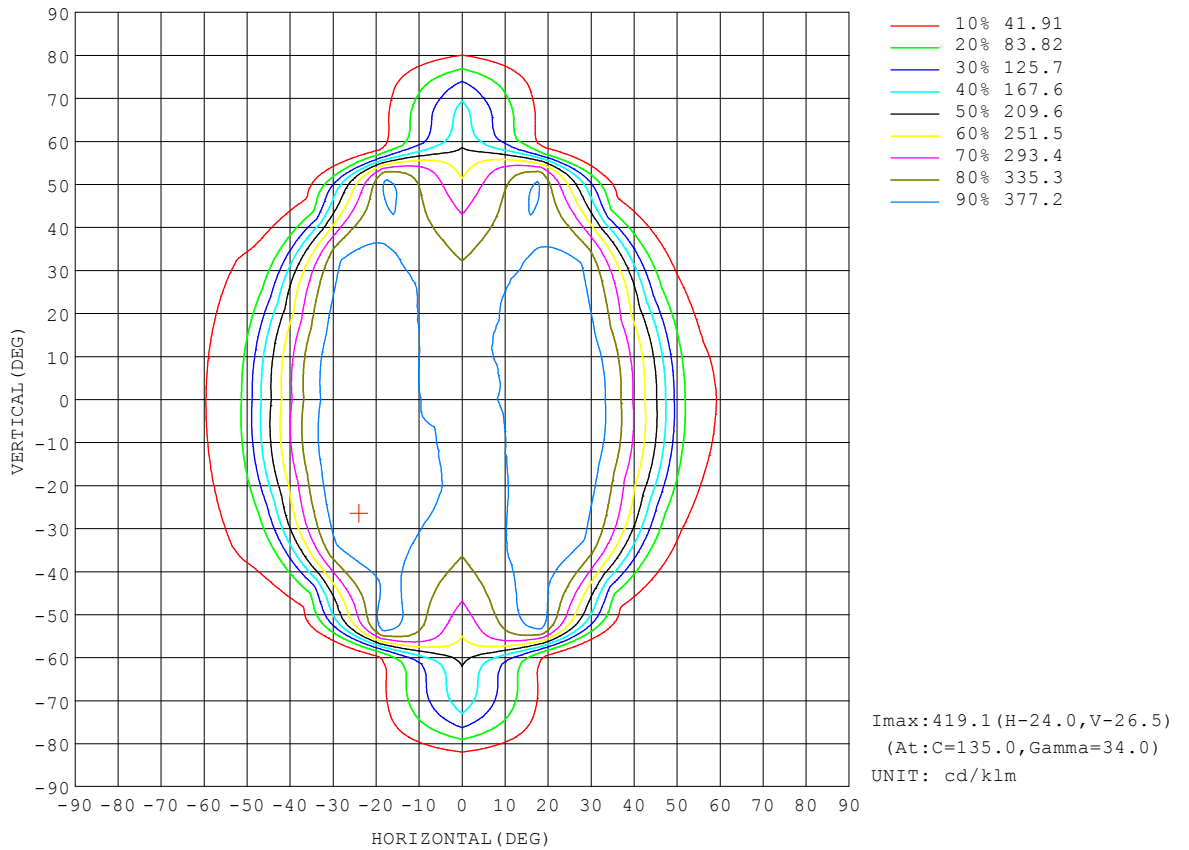
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	63	53	46	62	52	46	61	52	46	40
0.80	74	64	57	73	63	57	71	62	57	50
1.00	83	73	67	82	73	67	79	74	66	60
1.25	90	81	75	88	80	75	86	79	74	67
1.50	94	86	80	93	85	80	90	83	79	72
2.00	100	93	88	98	92	87	95	90	86	79
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	96	104	99	95	100	96	92	84
4.00	109	104	100	106	102	99	102	99	96	87
5.00	110	106	103	108	104	101	103	101	98	89
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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

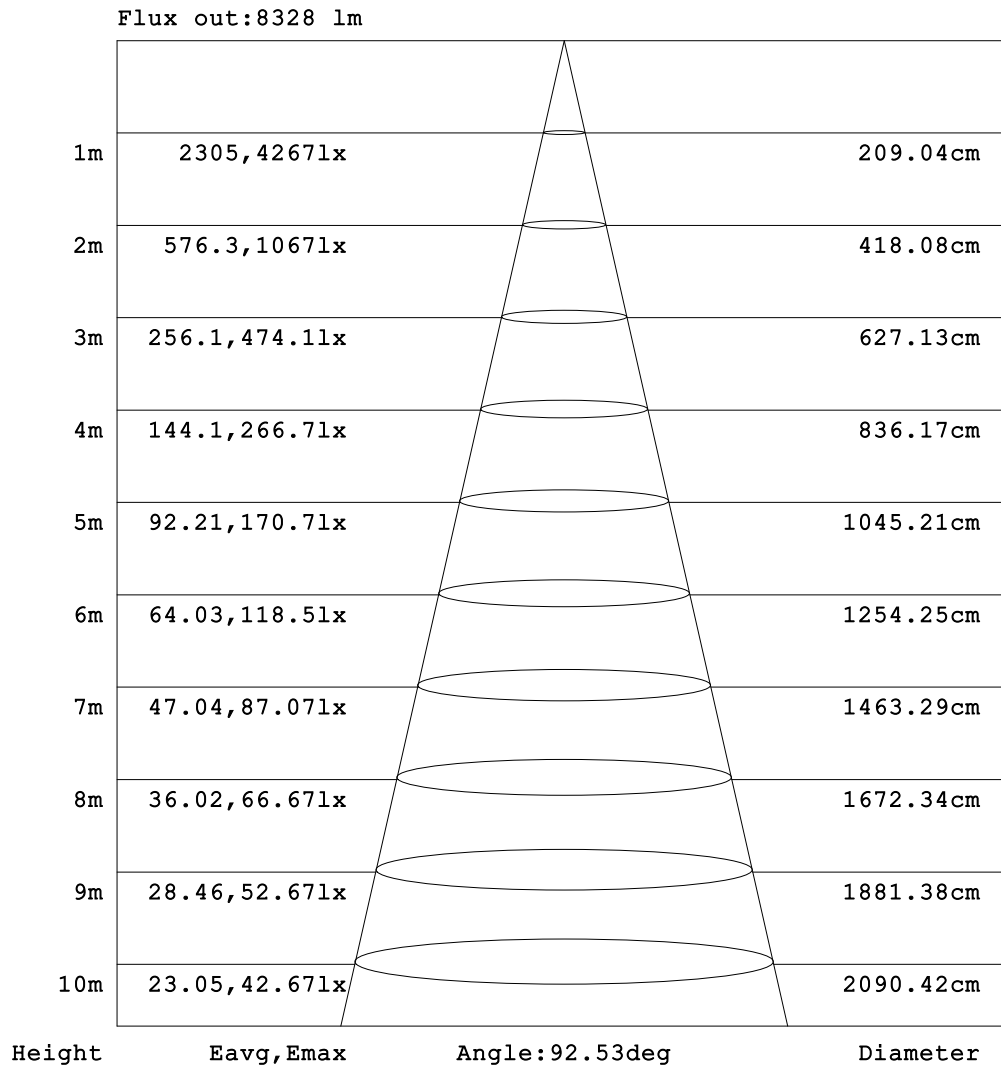


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Kaye
 Test Date:2017-11-10

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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 lm		
NAME: LED Linear Lighting System	TYPE:	WEIGHT:4kg
SPEC.:	DIM.: 1500*70*85mm	SERIAL No.:
MFR.: CoreShine	SUR.:1500*70mm	Shielding Angle:

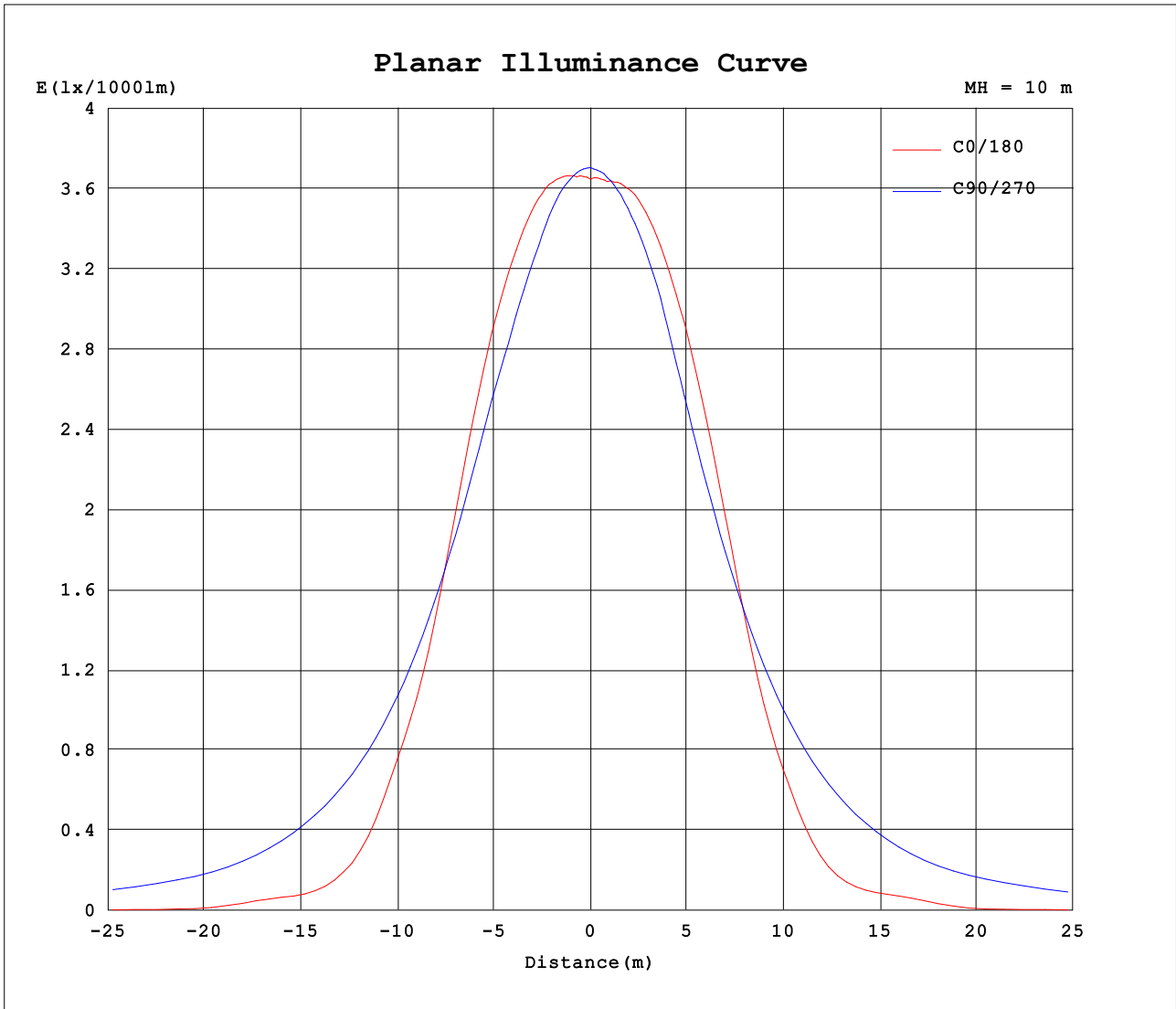


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:232.95V I:0.3095A P:70.672W PF:0.9803 Freq:49.97Hz Lamp Flux:11503.3x1 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	365	364	364	367	371	370	371	365	365	364	364	367	371	370	371	365			
5	371	368	366	368	371	372	373	369	368	366	366	367	370	371	371	370			
10	382	376	371	367	371	374	379	377	378	375	371	368	370	374	376	378			
15	394	388	378	368	368	378	387	389	390	386	379	369	371	375	382	389			
20	403	397	386	370	366	385	398	399	399	396	387	371	368	375	389	397			
25	409	403	394	374	362	386	405	406	403	402	395	375	356	377	396	402			
30	399	402	401	379	355	383	414	405	394	400	403	376	341	376	402	398			
35	360	376	406	385	340	382	419	384	358	374	406	372	325	372	403	369			
40	288	317	393	390	323	380	407	327	285	311	392	371	306	371	386	304			
45	214	239	344	398	302	386	357	239	199	218	331	377	284	378	326	221			
50	113	132	224	409	278	400	230	133	103	111	187	391	258	387	193	112			
55	52.0	54.8	83.6	390	252	396	80.4	58.0	53.8	50.2	55.3	336	231	338	58.8	46.5			
60	38.5	37.7	29.3	108	222	119	31.1	43.8	38.9	38.5	27.1	37.3	201	54.9	23.5	34.2			
65	10.0	12.4	21.2	16.0	201	16.9	21.2	12.1	8.91	10.6	14.8	14.4	185	14.0	15.9	9.69			
70	5.61	7.21	8.77	11.8	191	12.0	8.78	7.48	5.71	6.85	7.28	9.15	162	9.23	7.03	6.55			
75	4.04	4.89	6.90	7.92	144	7.96	7.09	5.15	4.02	4.65	6.44	6.19	111	6.35	6.24	4.41			
80	2.82	3.05	6.32	5.62	69.6	5.60	6.65	3.27	2.74	2.59	5.98	4.45	41.9	4.41	5.64	2.51			
85	3.14	3.07	2.99	3.99	15.4	3.93	3.04	3.17	3.18	3.21	2.67	3.25	7.28	3.16	2.65	3.11			
90	2.59	2.88	2.66	2.84	1.94	3.03	2.64	2.96	2.46	2.28	1.86	1.43	1.07	1.39	1.80	2.15			
95	1.56	1.63	1.63	1.22	1.60	1.14	1.56	1.68	1.51	1.49	1.36	1.04	1.41	1.12	1.36	1.43			
100	1.18	1.29	1.41	1.24	1.71	1.16	1.33	1.29	1.13	1.16	1.17	1.13	1.50	1.20	1.25	1.14			
105	1.02	1.10	1.40	1.36	1.79	1.30	1.30	1.10	0.97	1.02	1.18	1.27	1.58	1.32	1.30	0.97			
110	1.05	1.16	1.54	1.51	1.85	1.47	1.46	1.14	0.98	1.07	1.34	1.46	1.76	1.50	1.44	1.09			
115	1.24	1.35	1.63	1.72	2.04	1.69	1.56	1.31	1.15	1.22	1.46	1.64	1.88	1.63	1.50	1.26			
120	1.36	1.48	1.71	1.92	2.15	1.93	1.67	1.42	1.27	1.34	1.61	1.82	1.91	1.75	1.59	1.39			
125	1.51	1.62	1.76	2.07	2.33	2.12	1.83	1.58	1.43	1.52	1.77	2.02	2.07	1.95	1.67	1.54			
130	1.73	1.81	1.82	2.21	2.44	2.24	1.94	1.76	1.64	1.70	1.90	2.20	2.21	1.98	1.73	1.73			
135	1.91	1.95	1.85	2.19	2.36	2.25	2.03	1.90	1.81	1.84	2.02	2.09	2.29	2.02	1.77	1.81			
140	2.02	1.98	1.90	2.21	2.44	2.23	2.10	1.99	1.93	1.93	2.06	2.12	2.44	2.15	1.83	1.84			
145	2.08	2.02	1.98	2.30	2.55	2.24	2.15	2.05	2.00	2.00	2.07	2.18	2.54	2.21	1.94	1.90			
150	2.14	2.11	2.12	2.32	2.59	2.30	2.17	2.10	2.06	2.05	2.12	2.29	2.60	2.38	2.10	2.00			
155	2.23	2.23	2.29	2.46	2.62	2.39	2.22	2.17	2.17	2.13	2.20	2.41	2.58	2.51	2.28	2.17			
160	2.38	2.41	2.45	2.56	2.57	2.48	2.31	2.27	2.33	2.25	2.33	2.47	2.62	2.60	2.46	2.37			
165	2.58	2.59	2.59	2.63	2.61	2.55	2.46	2.41	2.54	2.42	2.48	2.57	2.65	2.65	2.59	2.56			
170	2.76	2.73	2.68	2.67	2.66	2.63	2.59	2.58	2.75	2.60	2.60	2.64	2.68	2.69	2.69	2.70			
175	2.88	2.80	2.73	2.71	2.70	2.69	2.68	2.70	2.88	2.73	2.70	2.70	2.72	2.71	2.73	2.77			
180	2.92	2.81	2.75	2.74	2.74	2.74	2.75	2.78	2.93	2.80	2.76	2.73	2.74	2.74	2.75	2.77			

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: