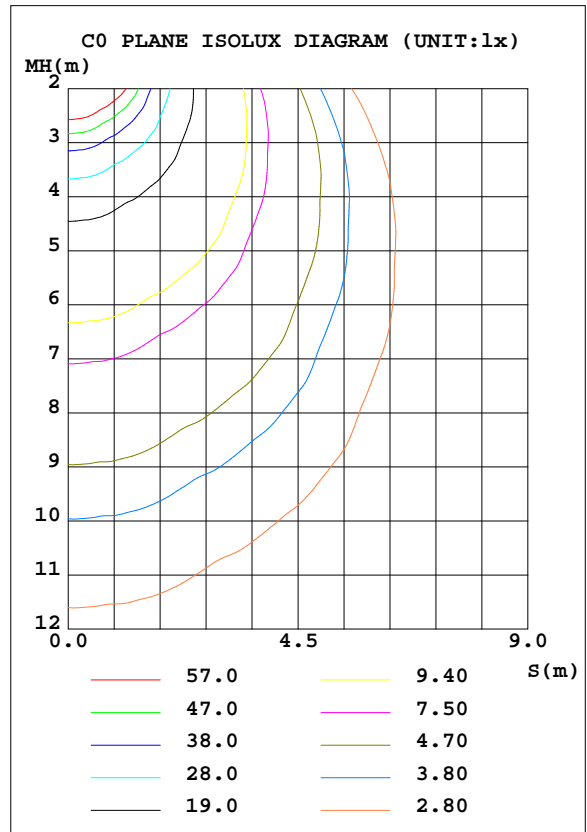
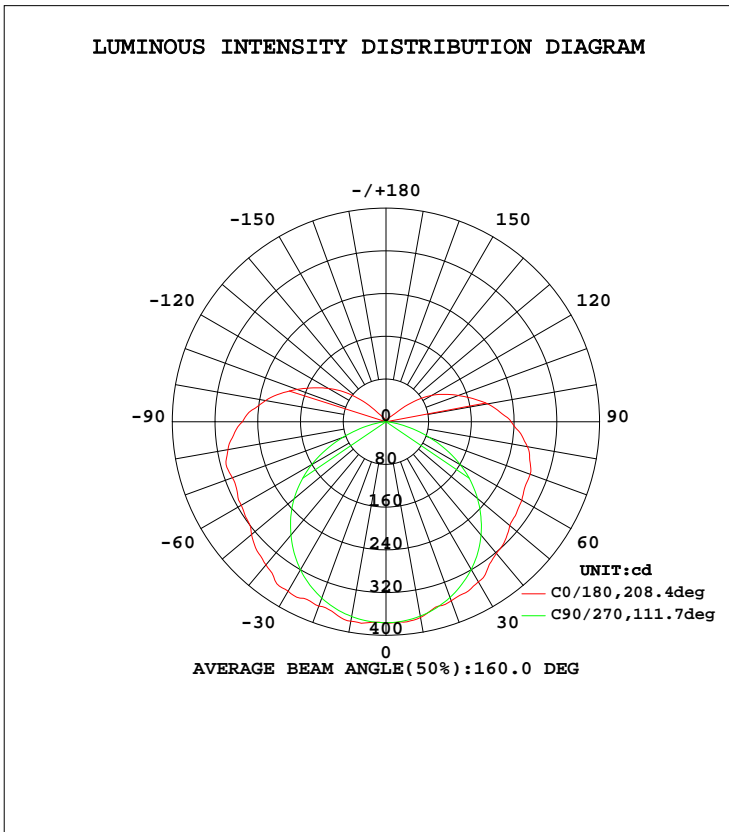


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.61 lm/W			
MODEL		I _{max} (cd)	380.1	S/MH(C0/180)	1.46
NOMINAL POWER(W)	22.5098	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1882.1	η UP, DN(C0-180)	9.5,40.1
NOMINAL FLUX(lm)	1882.1	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	9.8,40.6
LAMPS INSIDE	1	η up(%)	19.3	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230.251	η down(%)	80.7	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.750m [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	372.2	371.8	369.7	375.9	379.2	376.4	370.3	371.4	0- 10	35.75	35.75	1.9,1.9
20	356.9	348.4	350.3	359.1	367.4	360.7	351.4	347.9	10- 20	103.2	138.9	7.38,7.38
30	346.0	325.3	319.4	337.1	366.7	337.0	320.2	326.7	20- 30	159.9	298.8	15.9,15.9
40	321.9	297.6	277.0	319.1	350.1	316.9	276.9	300.0	30- 40	201.5	500.4	26.6,26.6
50	302.6	253.4	223.8	282.0	328.7	278.5	224.7	258.1	40- 50	222.0	722.3	38.4,38.4
60	293.9	215.3	160.9	236.9	313.1	230.1	160.6	222.8	50- 60	221.6	943.9	50.2,50.2
70	287.4	190.2	87.23	209.9	306.2	201.5	86.49	200.2	60- 70	207.7	1152	61.2,61.2
80	268.7	179.6	22.09	207.7	300.5	198.0	21.03	189.2	70- 80	192.6	1344	71.4,71.4
90	234.5	150.8	2.811	180.8	269.1	172.2	2.601	159.6	80- 90	174.4	1519	80.7,80.7
100	193.3	115.7	2.536	144.6	229.2	136.5	2.376	118.8	90-100	145.4	1664	88.4,88.4
110	144.4	71.83	2.132	99.97	177.7	93.13	1.997	81.93	100-110	105.2	1769	94,94
120	99.10	26.03	2.367	58.39	125.0	51.65	2.106	32.72	110-120	64.83	1834	97.4,97.4
130	39.06	8.363	2.671	16.05	68.92	14.35	2.384	9.318	120-130	31.32	1865	99.1,99.1
140	11.96	5.249	2.940	8.638	17.49	7.950	2.738	5.695	130-140	9.592	1875	99.6,99.6
150	6.756	3.733	3.252	5.064	8.668	4.649	3.093	3.639	140-150	3.790	1879	99.8,99.8
160	3.859	3.611	3.488	3.851	4.481	3.774	3.429	3.522	150-160	1.938	1881	99.9,99.9
170	3.757	3.633	3.623	3.663	3.749	3.615	3.623	3.640	160-170	1.043	1882	100,100
180	3.783	3.665	3.741	3.741	3.774	3.665	3.732	3.741	170-180	0.3507	1882	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

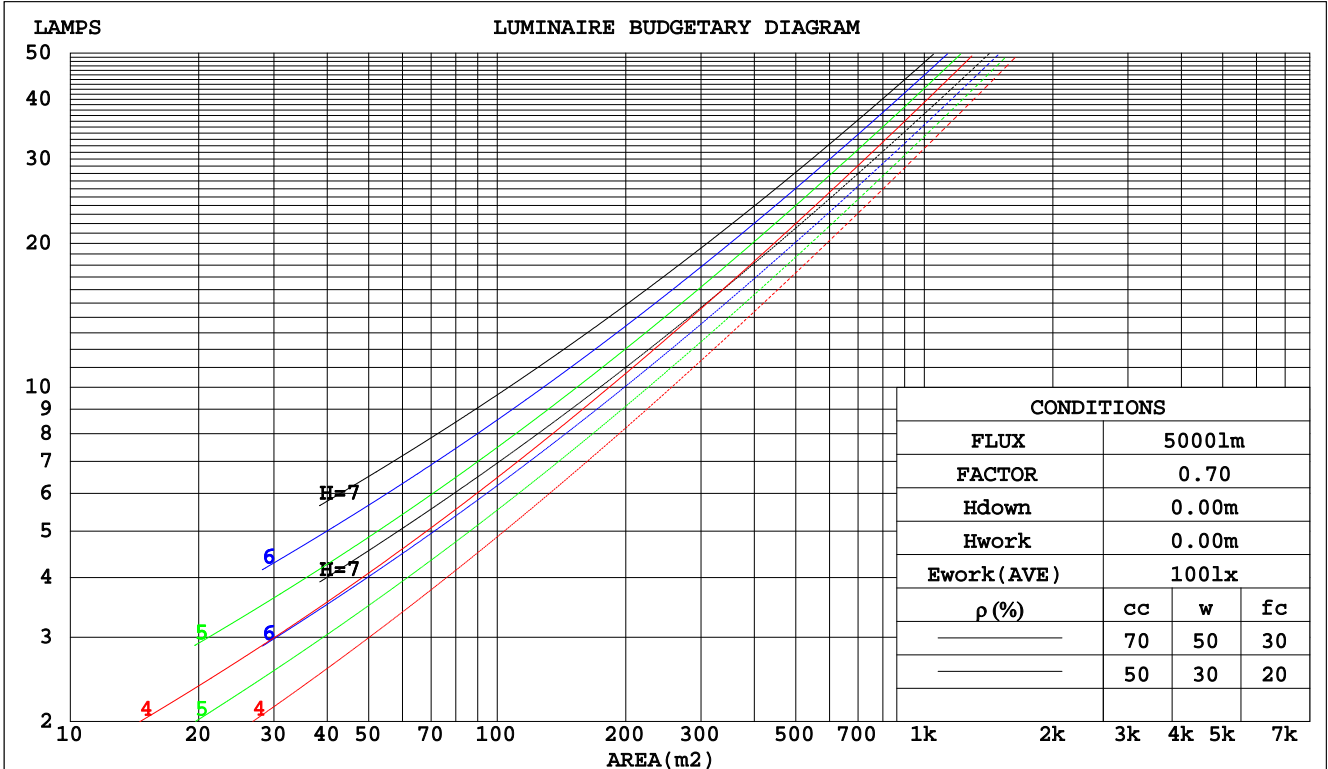
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.750m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	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															
	Coefficients of Utilization(CU)															
0.0	1.14	1.14	1.14	1.10	1.10	1.10	1.00	1.00	1.00	.92	.92	.92	.84	.84	.84	.81
1.0	.94	.89	.83	.90	.85	.80	.82	.78	.74	.75	.71	.68	.68	.65	.63	.59
2.0	.80	.72	.65	.77	.69	.63	.70	.64	.58	.63	.59	.54	.58	.54	.50	.47
3.0	.69	.60	.53	.66	.58	.51	.60	.53	.48	.55	.49	.44	.50	.45	.41	.38
4.0	.61	.51	.44	.58	.49	.42	.53	.46	.40	.48	.42	.37	.44	.39	.35	.32
5.0	.54	.44	.37	.52	.43	.36	.47	.40	.34	.43	.37	.32	.39	.34	.30	.27
6.0	.48	.39	.32	.46	.38	.31	.42	.35	.29	.39	.32	.28	.36	.30	.26	.23
7.0	.44	.34	.28	.42	.33	.27	.38	.31	.26	.35	.29	.24	.32	.27	.23	.20
8.0	.40	.31	.25	.38	.30	.24	.35	.28	.23	.32	.26	.21	.30	.24	.20	.18
9.0	.36	.28	.22	.35	.27	.21	.32	.25	.20	.30	.24	.19	.27	.22	.18	.16
10.0	.33	.25	.20	.32	.24	.19	.30	.23	.18	.28	.22	.17	.25	.20	.16	.14



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	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	.407	.232	.073	.394	.225	.071	.369	.212	.068	.347	.200	.064	.326	.189	.061	
2.0	.345	.189	.058	.333	.184	.057	.311	.173	.054	.291	.163	.051	.271	.154	.048	
3.0	.304	.162	.048	.293	.157	.047	.273	.148	.045	.254	.139	.043	.237	.131	.041	
4.0	.272	.141	.042	.262	.137	.041	.244	.129	.039	.227	.122	.037	.211	.115	.035	
5.0	.246	.125	.036	.237	.122	.035	.220	.115	.034	.205	.108	.032	.190	.102	.031	
6.0	.225	.113	.032	.217	.109	.031	.201	.103	.030	.187	.097	.029	.174	.092	.027	
7.0	.207	.102	.029	.199	.099	.028	.186	.094	.027	.173	.088	.026	.160	.083	.024	
8.0	.191	.094	.026	.185	.091	.026	.172	.086	.025	.160	.081	.023	.149	.076	.022	
9.0	.178	.086	.024	.172	.084	.024	.160	.079	.022	.149	.075	.021	.139	.070	.020	
10.0	.167	.080	.022	.161	.078	.022	.150	.073	.021	.140	.069	.020	.130	.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	.338	.338	.338	.289	.289	.289	.197	.197	.197	.113	.113	.113	.036	.036	.036	
1.0	.335	.304	.275	.287	.261	.237	.196	.179	.164	.113	.104	.095	.036	.033	.031	
2.0	.329	.281	.241	.282	.242	.208	.193	.167	.145	.111	.097	.085	.036	.031	.028	
3.0	.321	.265	.220	.275	.228	.190	.189	.159	.134	.109	.093	.079	.035	.030	.026	
4.0	.313	.252	.206	.269	.218	.179	.185	.152	.126	.107	.089	.074	.034	.029	.024	
5.0	.305	.243	.196	.262	.210	.171	.181	.147	.121	.105	.086	.071	.034	.028	.024	
6.0	.298	.235	.189	.256	.203	.165	.177	.142	.117	.102	.084	.069	.033	.027	.023	
7.0	.291	.228	.184	.250	.198	.161	.173	.139	.114	.100	.082	.068	.032	.027	.022	
8.0	.284	.223	.180	.244	.193	.157	.169	.136	.112	.098	.080	.066	.032	.026	.022	
9.0	.277	.218	.177	.239	.189	.155	.166	.133	.110	.096	.078	.066	.031	.026	.022	
10.0	.272	.214	.175	.234	.185	.153	.162	.131	.109	.095	.077	.065	.031	.025	.021	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME:		TYPE:					WEIGHT:				
SPEC.:		DIM.:					SERIAL No.:				
MFR.:		SUR.:					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		17.7	19.1	18.2	19.6	20.2	14.9	16.3	15.4	16.8	17.4
	3H	20.9	22.2	21.4	22.7	23.3	16.1	17.4	16.7	17.9	18.6
	4H	22.7	23.9	23.2	24.5	25.1	16.5	17.8	17.1	18.3	19.0
	6H	24.6	25.8	25.2	26.4	27.1	16.8	17.9	17.4	18.5	19.2
	8H	25.7	26.8	26.3	27.4	28.1	16.8	17.9	17.4	18.5	19.2
	12H	26.9	27.9	27.5	28.6	29.3	16.8	17.9	17.4	18.5	19.2
	4H 2H	18.2	19.4	18.8	20.0	20.6	16.2	17.4	16.7	17.9	18.6
	3H	21.7	22.7	22.3	23.3	24.0	17.6	18.7	18.2	19.3	20.0
	4H	23.7	24.7	24.3	25.3	26.0	18.2	19.2	18.8	19.8	20.6
	6H	25.9	26.8	26.5	27.4	28.2	18.6	19.5	19.3	20.2	20.9
	8H	27.1	27.9	27.7	28.6	29.4	18.8	19.6	19.4	20.3	21.1
	12H	28.4	29.2	29.1	29.9	30.7	18.9	19.6	19.5	20.3	21.1
	8H 4H	24.0	24.8	24.7	25.5	26.3	19.9	20.7	20.6	21.4	22.2
	6H	26.5	27.2	27.2	27.9	28.8	20.8	21.5	21.5	22.2	23.1
	8H	28.0	28.6	28.7	29.3	30.2	21.2	21.8	21.9	22.5	23.4
	12H	29.6	30.1	30.3	30.9	31.7	21.5	22.0	22.2	22.8	23.6
	12H 4H	24.0	24.8	24.7	25.5	26.3	20.5	21.3	21.2	22.0	22.8
	6H	26.6	27.3	27.4	28.0	28.9	21.8	22.5	22.6	23.2	24.0
	8H	28.2	28.7	28.9	29.5	30.4	22.5	23.0	23.2	23.8	24.6
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.2				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1882 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.2)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.750m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

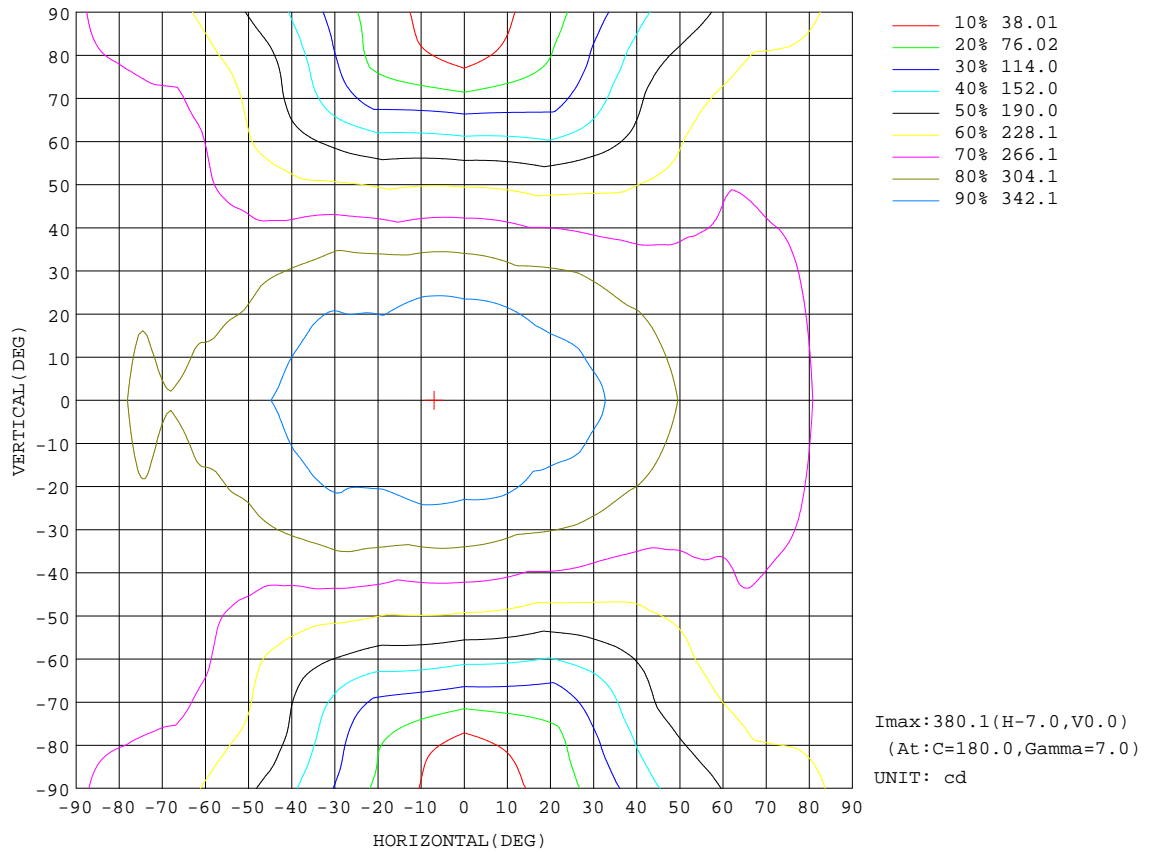
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	46	34	26	45	33	26	44	33	26	19
0.80	55	42	34	54	41	33	51	40	33	25
1.00	63	50	41	61	49	40	58	49	39	31
1.25	70	57	48	67	55	47	63	53	45	36
1.50	75	62	53	72	60	52	67	57	50	40
2.00	82	70	62	79	68	60	73	64	57	46
2.50	87	76	67	83	73	66	77	69	62	49
3.00	90	80	73	87	78	71	80	73	67	53
4.00	95	87	80	91	84	77	84	78	72	58
5.00	98	91	85	94	88	82	87	81	76	61
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:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

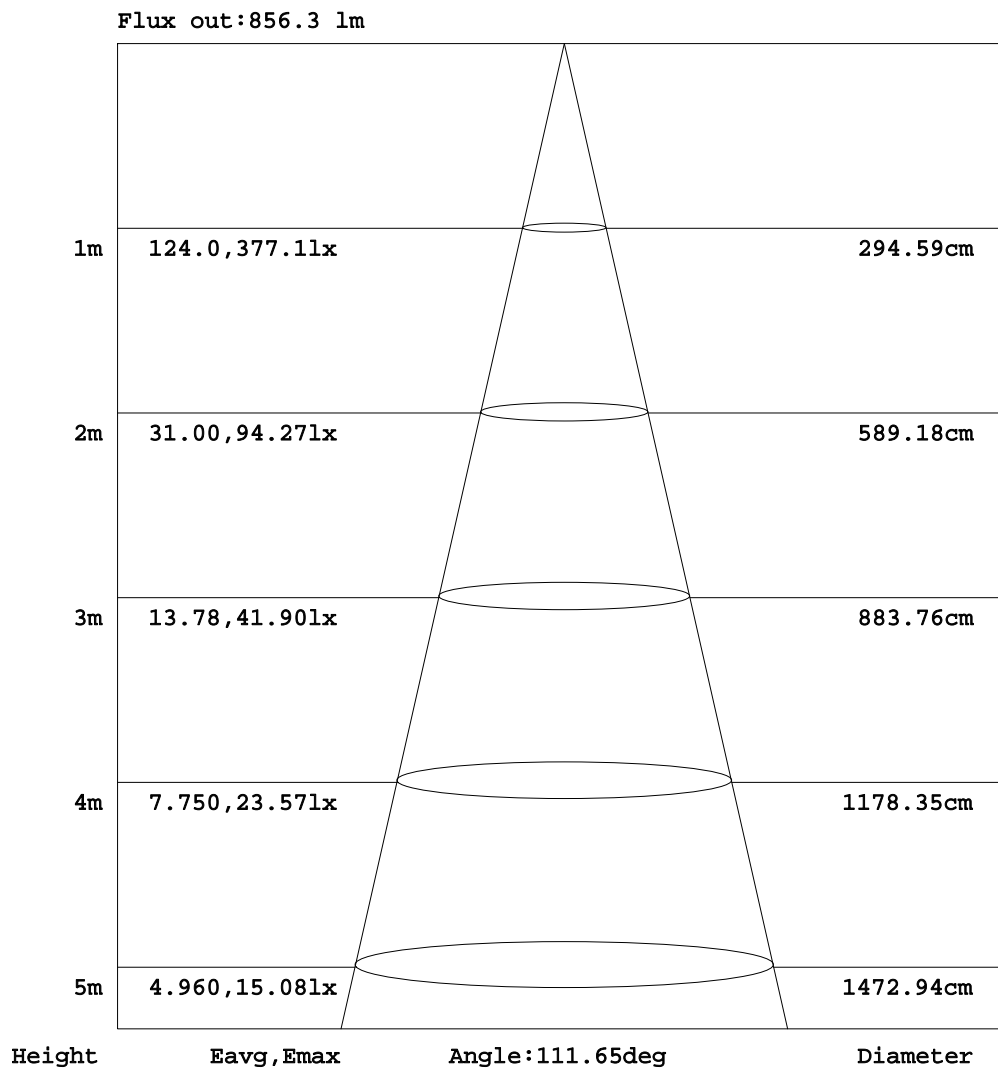


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks:

AAI Figure

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



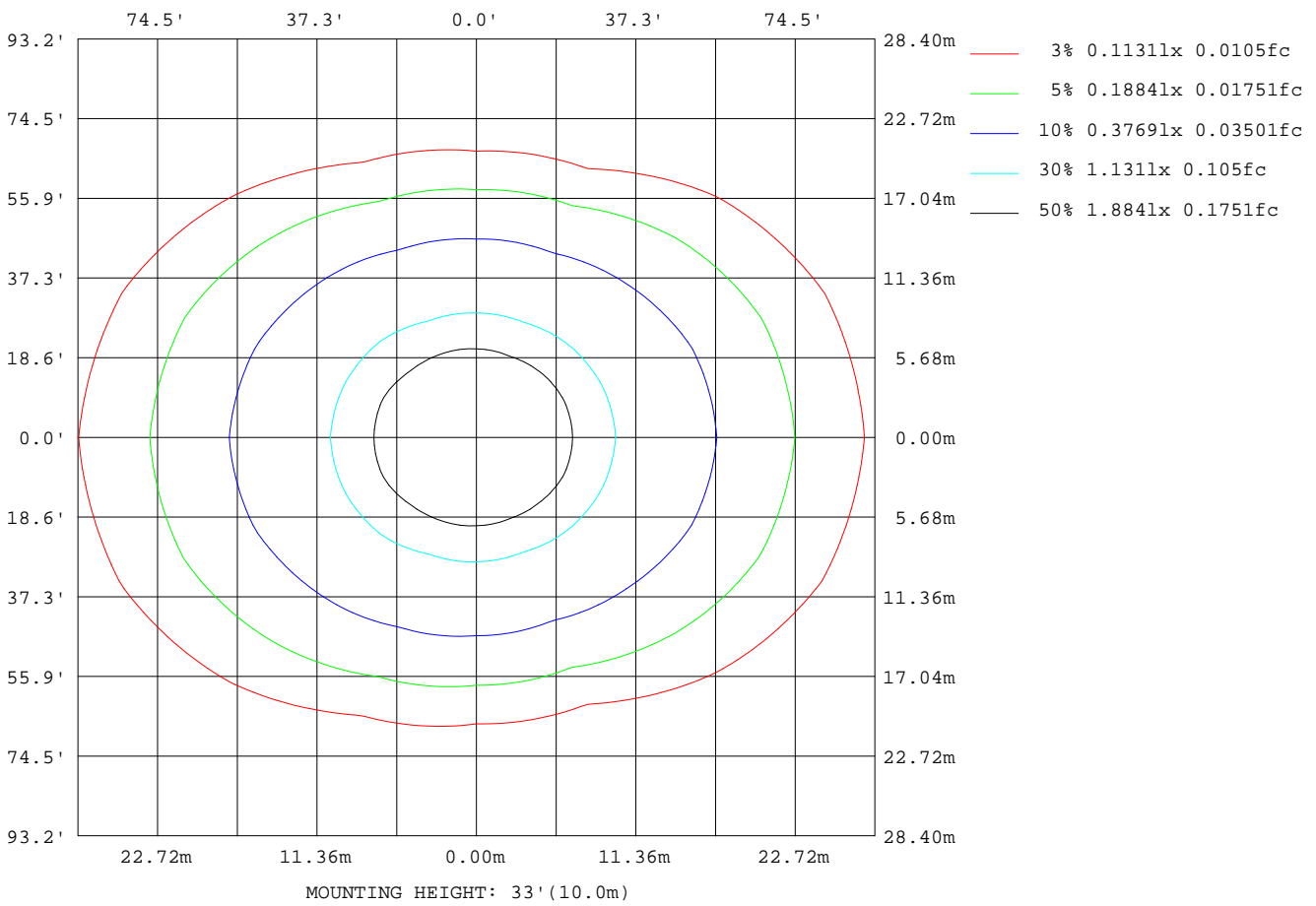
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.750m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks:

LED Avg.L Report

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

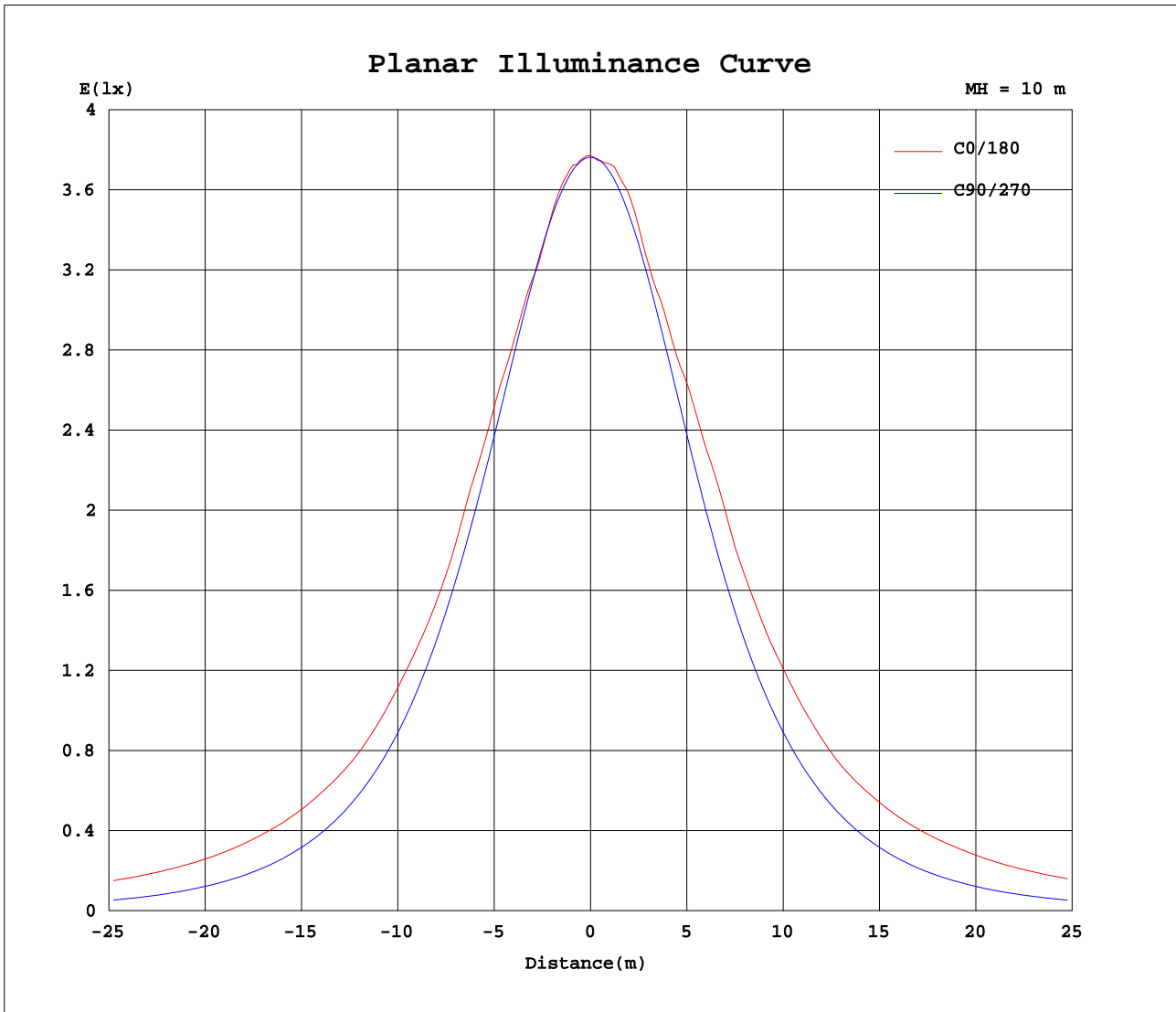
AvgL	cd/m2
L_0~180(65)av	7042
L_0~180(75)av	11369
L_0~180(85)av	30962
L_90~270(65)av	2942
L_90~270(75)av	1983
L_90~270(85)av	662
L_45(65)av	5020
L_45(75)av	7626
L_45(85)av	20891

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.750m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	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	377	377	377	376	376	376	376	375	377	377	377	376	376	376	376	375			
5	377	375	375	375	375	374	375	375	378	377	375	375	375	375	374	375			
10	372	372	372	370	370	370	376	377	379	378	376	370	370	370	371	371			
15	359	360	363	364	362	366	371	371	371	372	372	365	362	363	363	358			
20	357	355	348	353	350	358	359	361	367	362	361	358	351	353	348	353			
25	353	347	339	338	336	345	345	357	365	358	346	344	338	337	339	346			
30	346	340	325	318	319	329	337	359	367	359	337	329	320	317	327	340			
35	333	331	314	296	300	307	329	355	363	355	326	308	300	297	316	330			
40	322	313	298	275	277	283	319	339	350	338	317	283	277	277	300	313			
45	315	302	277	251	251	262	302	328	342	326	301	259	252	252	279	303			
50	303	289	253	223	224	238	282	315	329	313	278	234	225	226	258	290			
55	298	278	234	194	194	212	259	300	318	297	255	206	194	197	239	281			
60	294	271	215	163	161	183	237	292	313	288	230	176	161	167	223	275			
65	288	263	202	129	125	150	222	285	308	281	215	144	124	132	210	267			
70	287	261	190	99.4	87.2	116	210	281	306	276	201	107	86.5	108	200	266			
75	279	256	187	80.5	51.8	96.0	207	284	310	280	197	84.4	50.8	91.2	198	259			
80	269	246	180	69.8	22.1	85.2	208	277	301	273	198	72.7	21.0	82.2	189	250			
85	253	230	167	65.0	5.92	83.4	197	264	287	259	188	69.7	5.61	77.5	177	234			
90	235	212	151	58.3	2.81	78.2	181	247	269	242	172	65.8	2.60	70.1	160	215			
95	214	192	133	49.2	2.59	67.8	164	229	252	224	156	56.2	2.36	59.0	142	195			
100	193	172	116	36.5	2.54	54.2	145	207	229	203	136	43.7	2.38	43.7	119	174			
105	168	148	94.3	24.5	2.33	39.9	122	183	205	178	115	30.8	2.16	30.3	98.2	150			
110	144	126	71.8	11.7	2.13	25.8	100.0	157	178	152	93.1	17.8	2.00	16.3	81.9	122			
115	121	104	50.5	6.99	2.24	13.1	80.0	131	150	127	73.5	9.85	2.03	8.59	57.7	99.9			
120	99.1	78.6	26.0	5.09	2.37	8.62	58.4	107	125	104	51.6	6.72	2.11	5.95	32.7	82.0			
125	71.1	52.0	11.6	3.99	2.51	6.67	33.5	82.0	99.0	78.1	27.6	5.29	2.24	4.63	14.1	55.2			
130	39.1	23.5	8.36	3.24	2.67	5.32	16.1	53.1	68.9	49.0	14.4	4.14	2.38	3.51	9.32	24.7			
135	16.8	11.8	6.69	3.09	2.83	4.18	11.0	24.4	37.6	22.1	10.0	3.35	2.55	2.96	7.16	13.0			
140	12.0	8.32	5.25	3.17	2.94	3.57	8.64	13.9	17.5	13.1	7.95	3.17	2.74	2.97	5.69	8.89			
145	9.20	6.47	4.17	3.24	3.11	3.47	6.74	10.1	11.4	9.69	6.23	3.24	2.92	3.07	4.42	6.82			
150	6.76	5.01	3.73	3.31	3.25	3.50	5.06	7.81	8.67	7.47	4.65	3.30	3.09	3.19	3.64	5.08			
155	4.60	4.05	3.61	3.40	3.38	3.50	4.12	5.62	6.33	5.33	3.96	3.34	3.24	3.30	3.51	3.94			
160	3.86	3.77	3.61	3.48	3.49	3.52	3.85	4.24	4.48	4.14	3.77	3.46	3.43	3.42	3.52	3.67			
165	3.77	3.72	3.61	3.57	3.56	3.56	3.72	3.88	3.95	3.80	3.66	3.56	3.54	3.56	3.56	3.63			
170	3.76	3.71	3.63	3.62	3.62	3.61	3.66	3.71	3.75	3.62	3.62	3.62	3.62	3.66	3.64	3.64			
175	3.79	3.69	3.65	3.66	3.73	3.72	3.72	3.66	3.71	3.60	3.62	3.67	3.71	3.72	3.71	3.67			
180	3.78	3.67	3.66	3.73	3.74	3.74	3.74	3.68	3.77	3.68	3.66	3.72	3.73	3.74	3.74	3.67			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019-03-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.750m [K=1.0000]
 Remarks: