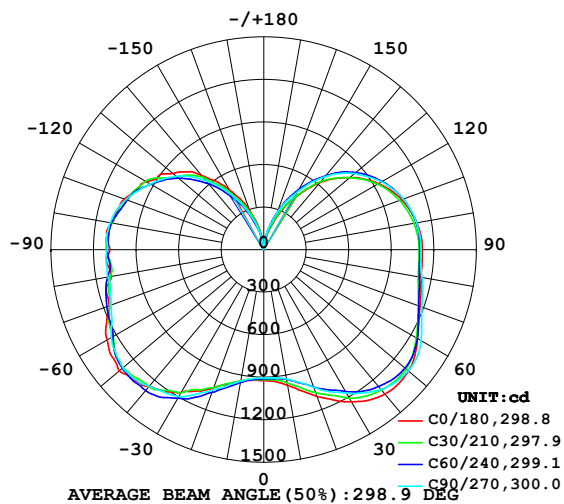


LUMINAIRE PHOTOMETRIC TEST REPORT

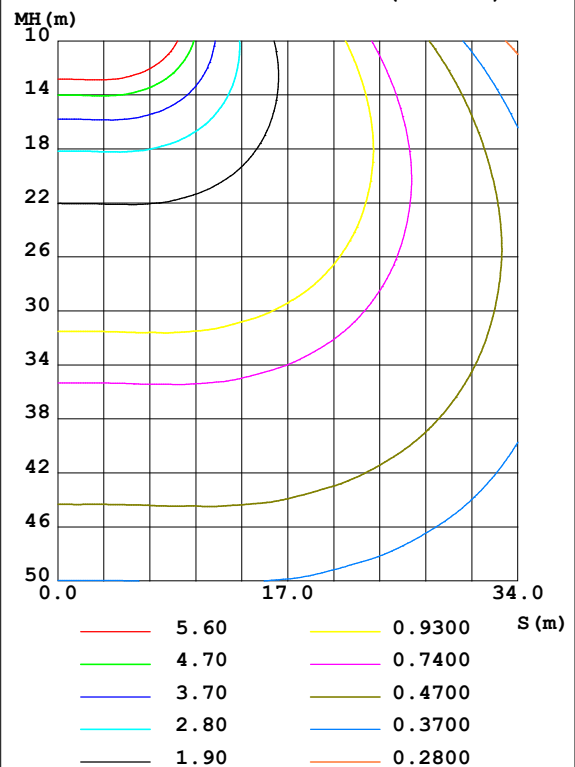
Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.33 lm/W			
MODEL	LOC-CL-MW(63/80/100)MCCT(30/40/50)D	I _{max} (cd)	1341	S/MH(C0/180)	1.99
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	2.01
RATED VOLTAGE(V)	100-277	TOTAL FLUX(lm)	12599	η UP,DN(C0-180)	20.6,29.4
NOMINAL FLUX(lm)	12598.6	CIE CLASS	DIFFUSE	η UP,DN(C180-360)	20.7,29.3
LAMPS INSIDE	1	η up(%)	41.4	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	120	η down(%)	58.6	CIBSE SHR MAX	2.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [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	972.2	942.3	926.8	933.2	942.2	944.9	942.3	929.7	0- 10	88.15	88.15	0.70,0.70
20	1102	1053	1033	1035	1037	1055	1055	1037	10- 20	282.3	370.5	2.94,2.94
30	1238	1182	1169	1159	1162	1188	1198	1172	20- 30	517.4	887.8	7.05,7.05
40	1329	1276	1287	1246	1263	1279	1259	1269	30- 40	775.7	1664	13.2,13.2
50	1332	1305	1331	1275	1331	1298	1297	1282	40- 50	1000	2664	21.1,21.1
60	1252	1246	1281	1209	1276	1227	1242	1215	50- 60	1145	3808	30.2,30.2
70	1172	1161	1187	1129	1158	1166	1146	1156	60- 70	1187	4995	39.7,39.7
80	1127	1111	1133	1083	1090	1107	1117	1102	70- 80	1197	6192	49.1,49.1
90	1119	1098	1108	1059	1086	1107	1104	1089	80- 90	1196	7388	58.6,58.6
100	1096	1084	1095	1066	1085	1090	1100	1080	90-100	1194	8582	68.1,68.1
110	1035	1033	1046	998.4	1047	1027	1035	1020	100-110	1120	9702	77,77
120	933.4	945.6	959.3	925.7	960.3	943.4	926.9	922.1	110-120	977.9	10680	84.8,84.8
130	792.4	818.3	835.6	794.4	836.1	792.6	805.0	795.3	120-130	785.0	11465	91,91
140	619.5	655.5	673.9	636.4	685.1	637.0	635.1	645.2	130-140	567.8	12033	95.5,95.5
150	413.6	452.1	468.5	430.5	485.7	434.3	436.5	443.0	140-150	345.5	12378	98.2,98.2
160	209.7	257.4	282.1	249.5	293.0	246.6	238.9	256.3	150-160	164.2	12542	99.6,99.6
170	69.63	92.88	106.9	98.94	118.3	91.31	84.12	98.81	160-170	50.23	12592	100,100
180	19.23	19.11	18.51	19.14	19.35	19.09	18.48	19.14	170-180	6.064	12599	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2138.9 lm

%lum = 17.0%

%lamp = 17.0%

Conical surface Flux(120deg): 3808.2 lm

%lum = 30.2%

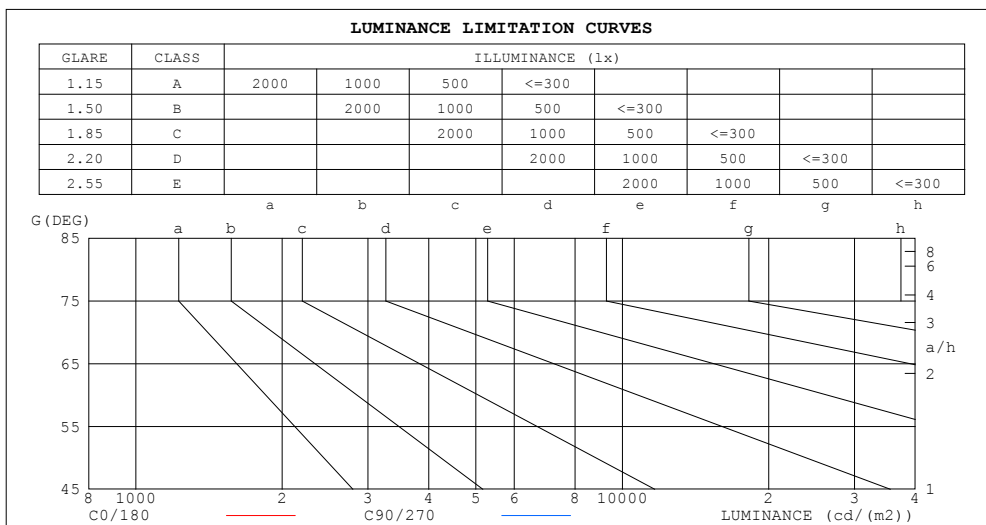
%lamp = 30.2%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	382569	379744
80	193135	194212
75	132057	133377
70	101961	103283
65	84901	86535
60	74549	76241
55	67517	68482
50	61674	61606
45	56444	55473

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	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	.412	.234	.074	.392	.223	.071	.355	.203	.065	.320	.185	.059	.289	.168	.054		
2.0	.346	.189	.058	.328	.180	.056	.294	.163	.051	.262	.147	.046	.233	.132	.042		
3.0	.302	.161	.048	.286	.153	.046	.255	.138	.042	.226	.124	.038	.200	.110	.034		
4.0	.269	.140	.041	.254	.133	.039	.226	.120	.036	.200	.107	.032	.175	.095	.029		
5.0	.243	.124	.036	.230	.118	.034	.204	.106	.031	.179	.095	.028	.157	.084	.025		
6.0	.222	.111	.032	.209	.106	.030	.185	.095	.028	.163	.085	.025	.142	.075	.022		
7.0	.204	.101	.029	.192	.096	.027	.170	.086	.025	.149	.077	.022	.130	.067	.020		
8.0	.189	.092	.026	.178	.088	.025	.157	.079	.022	.138	.070	.020	.120	.061	.018		
9.0	.175	.085	.024	.165	.081	.023	.146	.072	.020	.128	.064	.018	.111	.056	.016		
10.0	.164	.078	.022	.154	.075	.021	.137	.067	.019	.120	.059	.017	.104	.052	.015		

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	.506	.506	.506	.432	.432	.432	.295	.295	.295	.169	.169	.169	.054	.054	.054	
1.0	.505	.473	.444	.432	.406	.382	.296	.279	.264	.170	.162	.154	.054	.052	.050	
2.0	.499	.452	.411	.428	.389	.356	.293	.269	.248	.169	.156	.145	.054	.051	.047	
3.0	.492	.436	.391	.422	.376	.339	.290	.261	.238	.167	.153	.140	.054	.050	.046	
4.0	.485	.424	.378	.416	.367	.329	.286	.256	.231	.166	.150	.137	.053	.049	.045	
5.0	.477	.415	.369	.410	.359	.321	.282	.251	.227	.164	.147	.135	.053	.048	.044	
6.0	.470	.408	.363	.404	.353	.316	.279	.247	.224	.162	.145	.133	.052	.048	.044	
7.0	.463	.402	.358	.398	.348	.312	.275	.244	.221	.160	.144	.132	.052	.047	.044	
8.0	.457	.396	.355	.393	.344	.309	.272	.241	.220	.158	.142	.131	.051	.047	.043	
9.0	.451	.392	.352	.388	.340	.307	.269	.239	.218	.157	.141	.130	.051	.046	.043	
10.0	.445	.388	.350	.383	.337	.305	.266	.237	.217	.155	.140	.129	.050	.046	.043	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm										
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D					TYPE:			WEIGHT:		
SPEC.:5000K					DIM.:			SERIAL No.:		
MFR.:					SUR.:21cm*16cm			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	16.2	17.4	17.0	18.2	19.2	16.3	17.5	17.1	18.3	19.3
3H	19.1	20.2	19.9	21.0	22.0	19.2	20.2	20.0	21.1	22.1
4H	20.8	21.8	21.6	22.6	23.7	20.8	21.8	21.6	22.7	23.7
6H	22.6	23.6	23.5	24.4	25.5	22.7	23.6	23.5	24.5	25.6
8H	23.7	24.6	24.5	25.5	26.6	23.7	24.7	24.6	25.5	26.6
12H	24.9	25.8	25.8	26.7	27.8	25.0	25.8	25.8	26.7	27.8
4H 2H	17.1	18.1	17.9	19.0	20.0	17.1	18.2	18.0	19.0	20.1
3H	20.1	21.0	21.0	21.9	23.0	20.2	21.1	21.0	21.9	23.1
4H	21.9	22.7	22.8	23.6	24.8	22.0	22.8	22.9	23.7	24.8
6H	24.0	24.7	24.9	25.6	26.8	24.0	24.8	24.9	25.7	26.8
8H	25.1	25.8	26.0	26.7	27.9	25.2	25.9	26.1	26.8	27.9
12H	26.5	27.1	27.4	28.1	29.2	26.5	27.1	27.4	28.1	29.3
8H 4H	22.6	23.3	23.5	24.2	25.4	22.6	23.3	23.5	24.2	25.4
6H	24.9	25.5	25.8	26.4	27.6	25.0	25.5	25.9	26.5	27.7
8H	26.3	26.8	27.2	27.7	28.9	26.3	26.8	27.2	27.8	29.0
12H	27.8	28.3	28.8	29.3	30.5	27.9	28.3	28.8	29.3	30.5
12H 4H	22.8	23.4	23.7	24.3	25.5	22.8	23.4	23.7	24.4	25.6
6H	25.2	25.7	26.2	26.7	27.9	25.3	25.8	26.2	26.7	27.9
8H	26.7	27.1	27.6	28.1	29.3	26.7	27.2	27.7	28.1	29.4
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 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 12599 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 8.8$)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

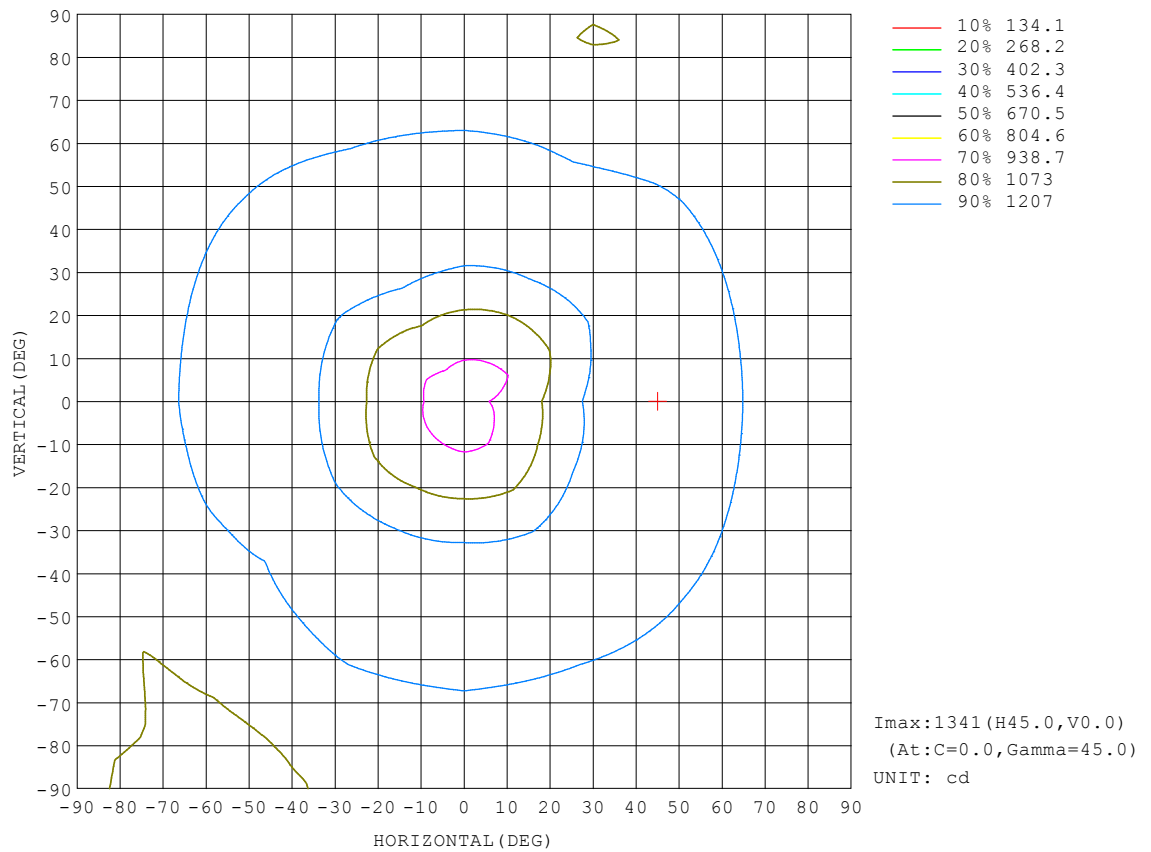
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	38	25	18	36	24	17	33	23	16	9
0.80	47	33	24	44	31	24	40	29	22	13
1.00	54	40	31	51	38	30	46	37	27	17
1.25	61	47	37	57	45	36	51	40	33	20
1.50	66	53	43	62	50	41	55	45	37	23
2.00	74	61	52	69	58	49	61	51	44	28
2.50	79	67	58	74	63	55	64	56	49	31
3.00	83	72	63	78	68	60	67	60	53	34
4.00	88	79	71	82	74	67	71	65	59	38
5.00	92	83	76	85	78	72	74	68	63	41
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

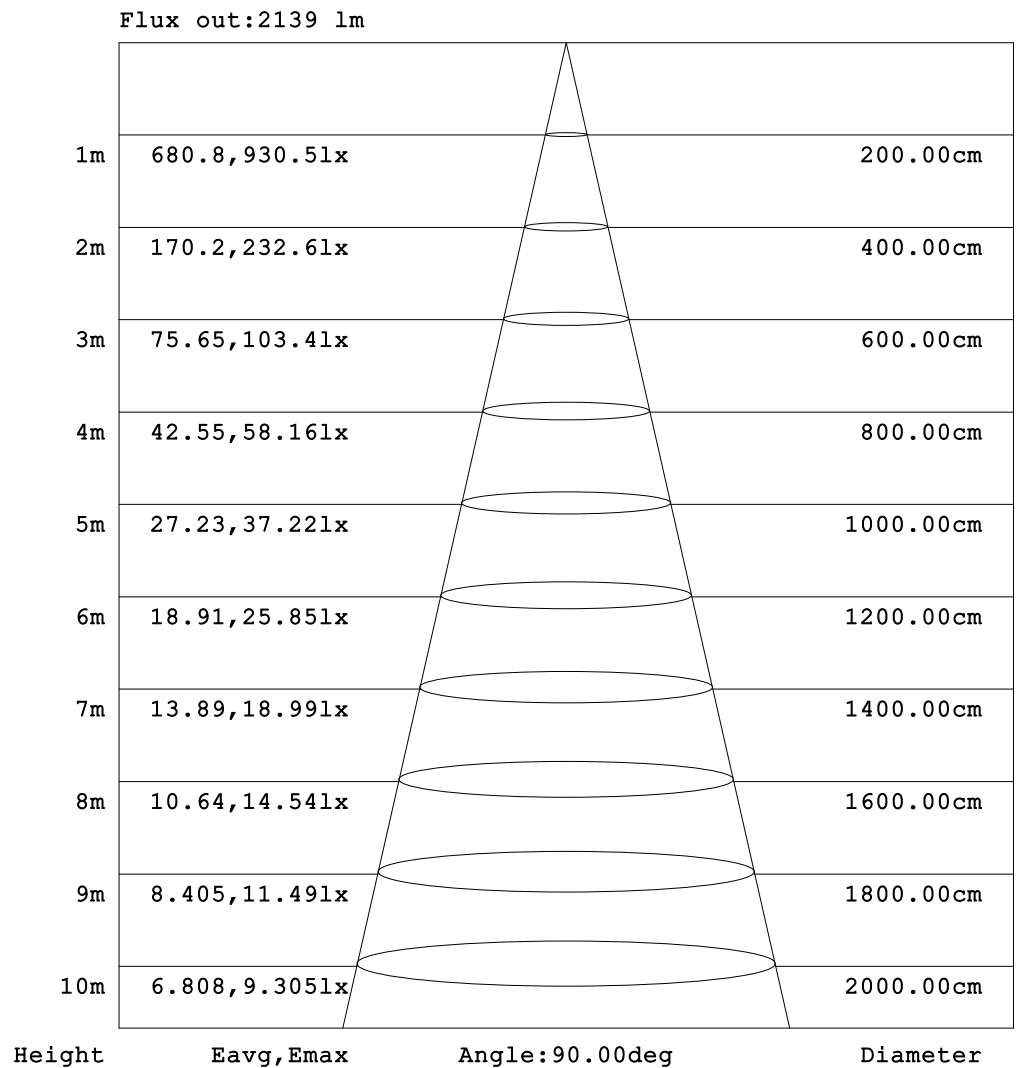


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

AAI Figure

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

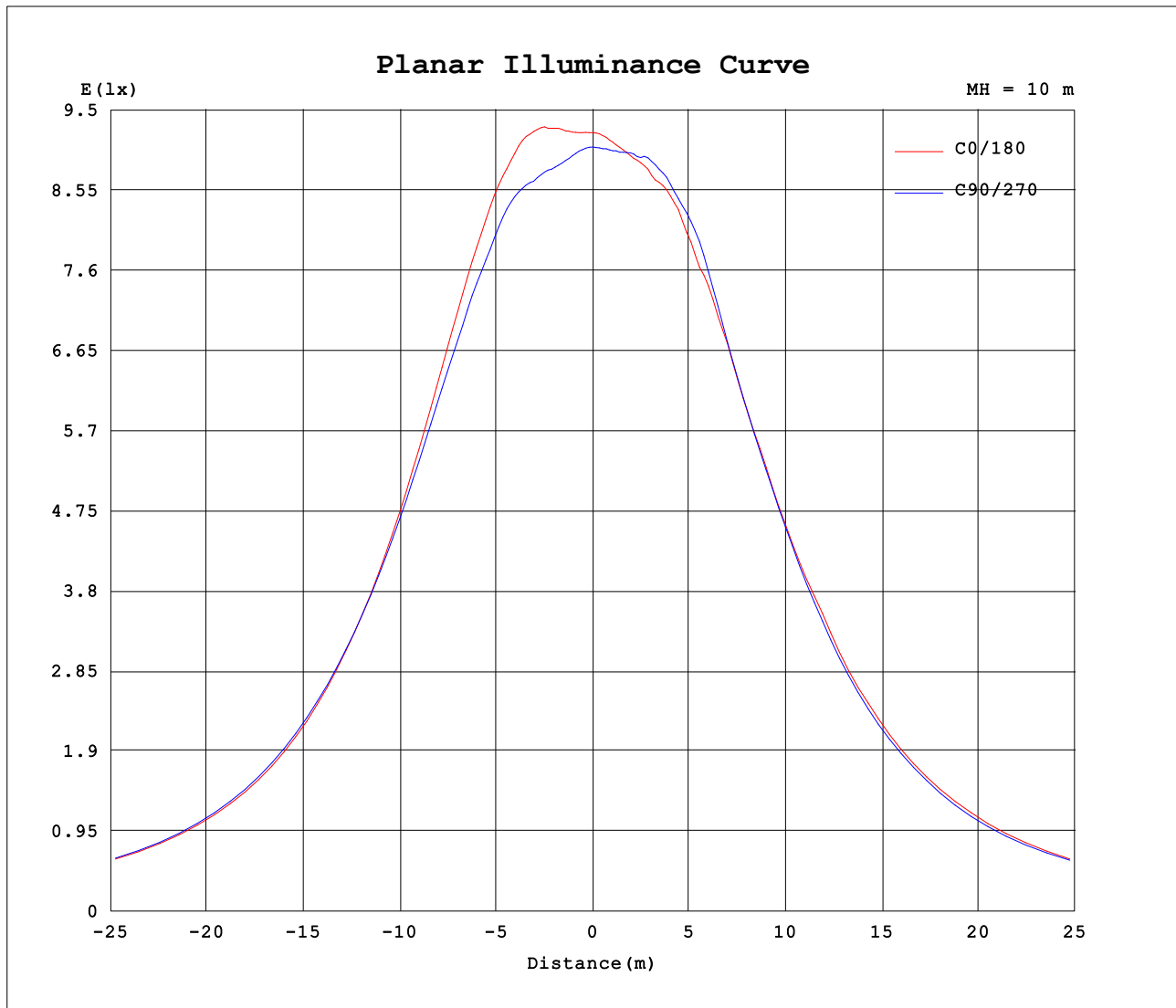


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity: 65.0%
Test Distance: 8.800m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.7V I:0.8020A P:95.20W PF:0.9921 Freq:59.98Hz Lamp Flux:12598.6x1 lm		
NAME:LOC-CL-MW(63/80/100)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	924	916	911	907	902	899	924	916	911	907	902	899						
5	934	922	913	909	908	908	925	920	920	913	908	903						
10	972	955	929	927	931	936	942	938	952	942	935	924						
15	1031	1008	973	970	980	981	981	978	1006	994	985	972						
20	1102	1075	1031	1033	1036	1033	1037	1037	1072	1055	1045	1029						
25	1171	1133	1091	1106	1095	1080	1100	1091	1149	1123	1115	1100						
30	1238	1211	1154	1169	1167	1151	1162	1166	1210	1198	1184	1161						
35	1295	1260	1219	1232	1227	1207	1225	1212	1270	1227	1232	1225						
40	1329	1292	1260	1287	1262	1229	1263	1261	1297	1259	1261	1276						
45	1341	1309	1290	1318	1286	1245	1298	1278	1305	1291	1268	1291						
50	1332	1311	1300	1331	1295	1255	1331	1295	1302	1297	1271	1292						
55	1301	1284	1286	1320	1285	1219	1310	1281	1280	1274	1250	1277						
60	1252	1241	1250	1281	1247	1171	1276	1226	1228	1242	1200	1231						
65	1206	1198	1203	1229	1203	1132	1223	1206	1197	1182	1179	1198						
70	1172	1159	1163	1187	1163	1095	1158	1156	1177	1146	1157	1154						
75	1148	1130	1135	1160	1121	1094	1151	1133	1152	1123	1122	1109						
80	1127	1107	1114	1133	1101	1065	1090	1097	1117	1117	1103	1100						
85	1120	1099	1102	1112	1095	1037	1110	1085	1091	1115	1067	1095						
90	1119	1096	1101	1108	1083	1035	1086	1111	1103	1104	1082	1096						
95	1114	1090	1101	1106	1078	1063	1111	1113	1100	1112	1091	1094						
100	1096	1075	1092	1095	1068	1064	1085	1087	1092	1100	1078	1081						
105	1070	1052	1074	1075	1043	1040	1068	1059	1055	1076	1053	1057						
110	1035	1019	1046	1046	1011	986	1047	1027	1026	1035	1019	1021						
115	990	977	1010	1007	970	959	994	1001	989	982	978	972						
120	933	926	965	959	929	923	960	965	922	927	924	920						
125	868	863	910	898	860	857	908	883	859	868	859	864						
130	792	790	847	836	788	801	836	801	784	805	791	799						
135	709	714	774	762	720	721	776	744	699	728	721	723						
140	620	629	682	674	645	628	685	666	608	635	646	644						
145	511	521	587	576	540	525	592	559	511	540	548	551						
150	414	419	486	468	434	427	486	457	411	436	444	442						
155	315	327	389	376	348	332	393	365	319	335	349	350						
160	210	230	285	282	258	241	293	273	221	239	253	260						
165	133	146	189	182	175	158	198	181	143	151	163	172						
170	69.6	78.1	108	107	106	91.8	118	106	76.9	84.1	92.2	105						
175	35.2	36.6	53.7	57.6	55.1	46.1	61.7	56.2	36.5	36.5	43.8	52.5						
180	19.2	17.3	20.9	18.5	18.8	19.5	19.3	17.1	21.0	18.5	18.9	19.4						

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks: