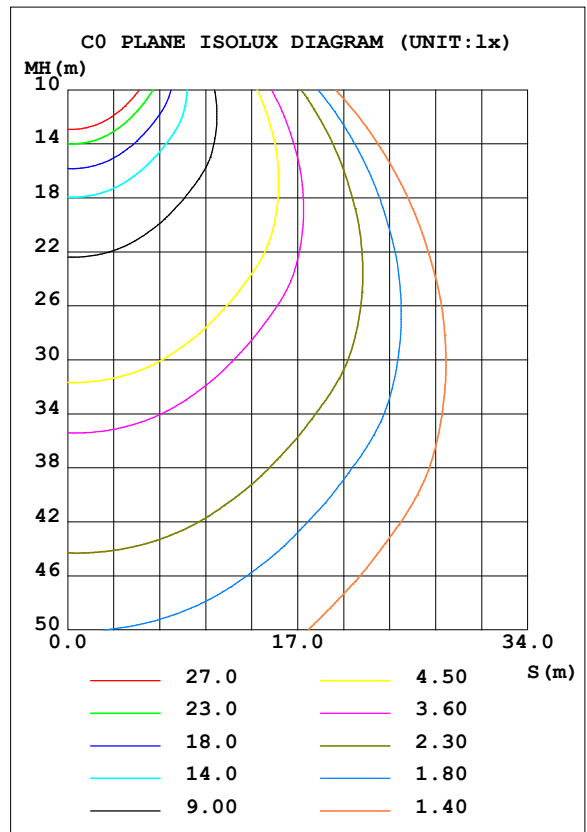
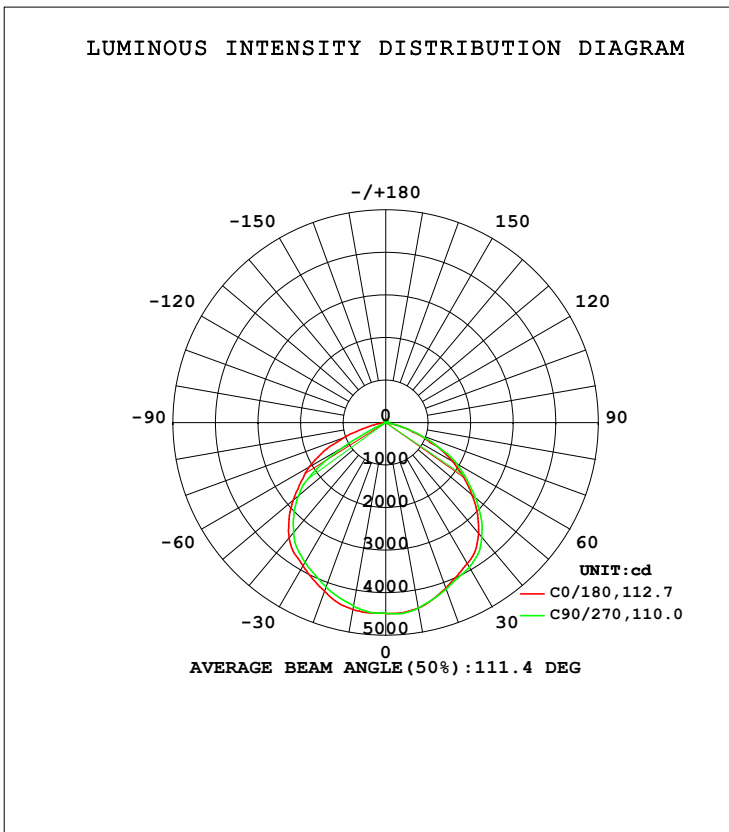


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.03 lm/W			
MODEL	100W	I _{max} (cd)	4504	S/MH (C0/180)	1.30
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	12191	η UP, DN (C0-180)	0.8, 49.8
NOMINAL FLUX (lm)	12191	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.8, 48.6
LAMPS INSIDE	1	η up (%)	1.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	98.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [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	4425	4423	4426	4457	4459	4433	4378	4387	0- 10	426.2	426.2	3.5,3.5
20	4140	4111	4161	4190	4220	4170	4111	4117	10- 20	1215	1642	13.5,13.5
30	3832	3692	3927	3764	3890	3748	3801	3687	20- 30	1833	3474	28.5,28.5
40	3393	3356	3514	3404	3536	3328	3371	3274	30- 40	2261	5736	47,47
50	2648	2792	2757	2902	2844	2832	2678	2735	40- 50	2404	8139	66.8,66.8
60	1804	1870	1920	2030	2059	2014	1120	1869	50- 60	2087	10226	83.9,83.9
70	817.0	890.3	854.0	1089	1053	1054	17.92	896.8	60- 70	1288	11514	94.4,94.4
80	90.19	74.75	70.63	135.1	211.7	193.4	3.601	103.1	70- 80	444.7	11958	98.1,98.1
90	6.800	9.162	9.837	9.005	11.09	11.58	5.699	6.755	80- 90	34.25	11993	98.4,98.4
100	13.57	13.93	7.678	12.56	13.90	13.31	12.34	14.46	90-100	10.69	12003	98.5,98.5
110	23.10	21.93	14.83	20.11	24.38	22.18	20.34	23.33	100-110	17.77	12021	98.6,98.6
120	33.18	31.19	27.20	28.89	34.79	31.29	29.91	32.50	110-120	25.97	12047	98.8,98.8
130	41.26	39.34	36.28	36.46	43.70	39.22	39.13	40.49	120-130	31.74	12079	99.1,99.1
140	47.32	46.19	43.87	43.48	49.67	45.89	46.69	46.82	130-140	33.22	12112	99.4,99.4
150	52.18	52.98	50.54	49.48	54.07	51.38	51.71	51.44	140-150	30.71	12143	99.6,99.6
160	57.72	59.07	56.62	54.66	59.16	55.73	56.43	55.16	150-160	25.08	12168	99.8,99.8
170	65.26	64.48	62.18	59.71	65.58	61.14	62.75	60.33	160-170	16.80	12185	99.9,99.9
180	68.88	65.62	67.65	63.66	69.07	65.47	67.83	63.56	170-180	6.144	12191	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 6944.7 lm

%lum = 57.0%

%lamp = 57.0%

Conical surface Flux(120deg): 10226 lm

%lum = 83.9%

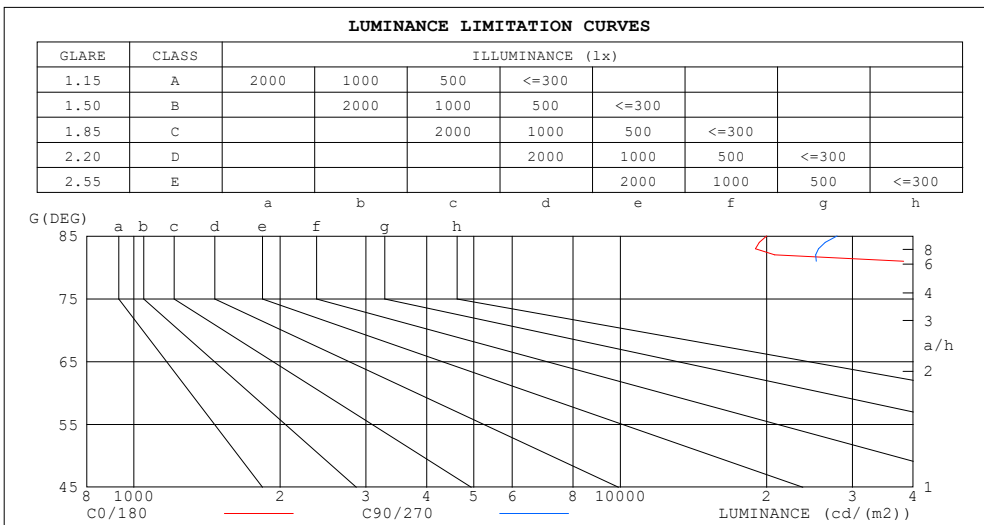
%lamp = 83.9%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

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



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	20002	27897
80	52265	40569
75	142366	146536
70	240377	249017
65	321580	317731
60	363144	382932
55	392076	404870
50	414587	427809
45	434372	447782

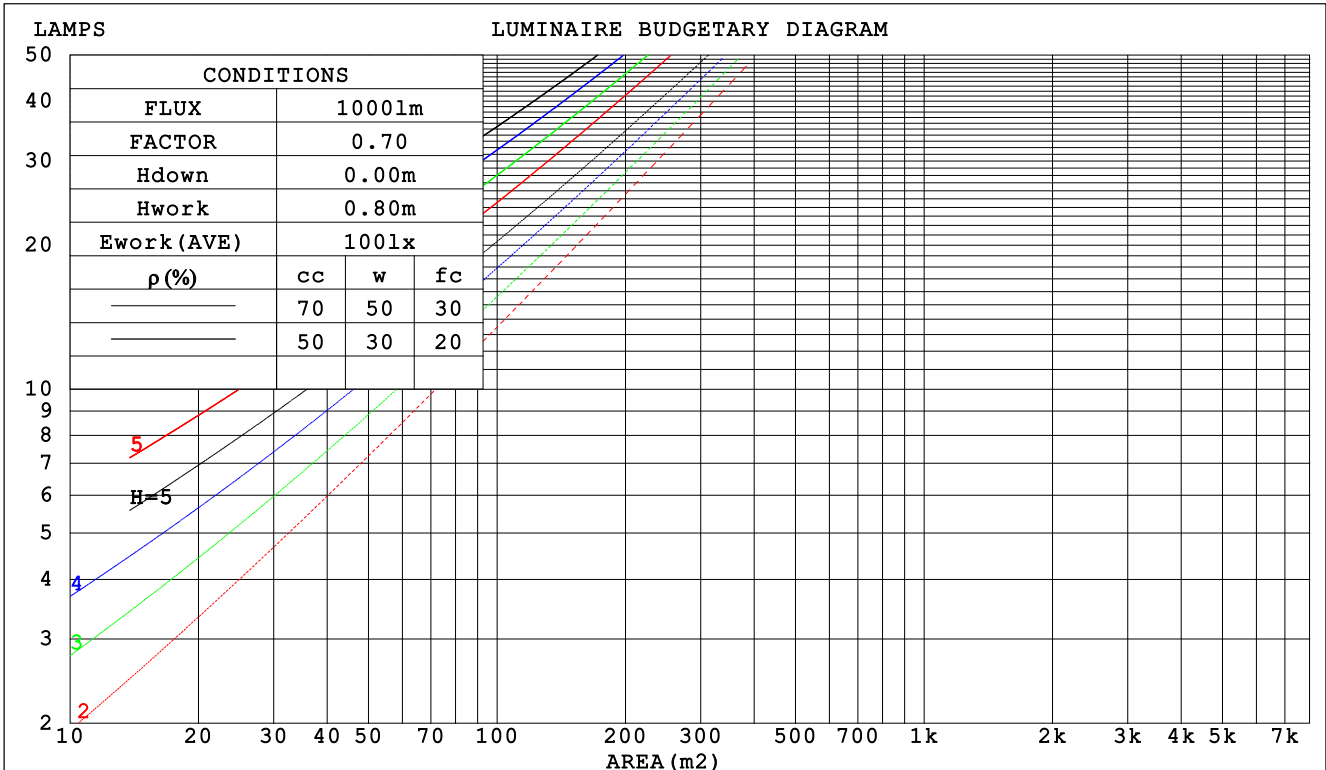
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.98
1.0	1.05	1.02	.98	1.03	.90	.96	.98	.96	.93	.94	.92	.90	.91	.89	.87	.85
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.83	.79	.76	.80	.77	.74	.72
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.74	.69	.65	.71	.67	.63	.61
4.0	.73	.64	.58	.71	.63	.57	.69	.62	.56	.66	.60	.55	.64	.59	.55	.52
5.0	.65	.56	.50	.64	.56	.50	.61	.54	.49	.59	.53	.48	.57	.52	.48	.45
6.0	.58	.50	.44	.57	.49	.43	.55	.48	.43	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.47	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.33	.43	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.31	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

WEC AND CCEC

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

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.274	.156	.049	.266	.152	.048	.252	.145	.046	.239	.138	.044	.227	.132	.043	
2.0	.267	.146	.045	.260	.143	.044	.248	.138	.043	.236	.133	.042	.226	.128	.040	
3.0	.252	.134	.040	.246	.132	.040	.235	.128	.039	.225	.123	.038	.216	.119	.037	
4.0	.236	.123	.036	.231	.121	.036	.221	.117	.035	.212	.114	.034	.204	.111	.034	
5.0	.220	.112	.033	.216	.111	.032	.207	.108	.032	.199	.105	.031	.192	.102	.031	
6.0	.206	.103	.030	.202	.102	.029	.194	.099	.029	.187	.097	.029	.180	.095	.028	
7.0	.193	.095	.027	.189	.094	.027	.182	.092	.027	.176	.090	.026	.169	.088	.026	
8.0	.181	.088	.025	.178	.087	.025	.171	.086	.024	.165	.084	.024	.160	.082	.024	
9.0	.170	.082	.023	.167	.081	.023	.161	.080	.023	.156	.078	.022	.151	.077	.022	
10.0	.160	.077	.021	.158	.076	.021	.152	.075	.021	.148	.073	.021	.143	.072	.021	

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.203	.203	.203	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.190	.169	.150	.163	.145	.129	.111	.100	.089	.064	.058	.052	.021	.019	.017	
2.0	.181	.145	.114	.155	.124	.098	.107	.086	.068	.061	.050	.040	.020	.016	.013	
3.0	.174	.127	.089	.149	.109	.078	.102	.076	.054	.059	.044	.032	.019	.014	.011	
4.0	.166	.113	.073	.143	.098	.063	.098	.068	.045	.057	.040	.026	.018	.013	.009	
5.0	.159	.103	.061	.137	.089	.053	.094	.062	.038	.055	.037	.022	.018	.012	.007	
6.0	.152	.095	.053	.131	.082	.046	.090	.057	.033	.052	.034	.019	.017	.011	.006	
7.0	.146	.088	.047	.126	.076	.041	.087	.053	.029	.050	.031	.017	.016	.010	.006	
8.0	.140	.082	.042	.120	.071	.037	.083	.050	.026	.048	.029	.016	.016	.010	.005	
9.0	.134	.077	.039	.115	.067	.034	.080	.047	.024	.047	.028	.014	.015	.009	.005	
10.0	.128	.073	.036	.111	.063	.031	.077	.044	.022	.045	.026	.013	.015	.009	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [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		25.0	26.5	25.3	26.7	26.9	25.2	26.6	25.4	26.8	27.1
	3H	25.9	27.2	26.2	27.5	27.7	26.1	27.4	26.4	27.6	27.9
	4H	26.0	27.3	26.3	27.5	27.8	26.2	27.4	26.5	27.7	28.0
	6H	26.0	27.1	26.3	27.4	27.7	26.1	27.3	26.5	27.6	27.9
	8H	25.9	27.0	26.3	27.3	27.7	26.1	27.2	26.4	27.5	27.8
	12H	25.9	26.9	26.2	27.3	27.6	26.0	27.1	26.4	27.4	27.8
	4H 2H	25.5	26.8	25.8	27.0	27.3	25.6	26.9	26.0	27.2	27.4
	3H	26.5	27.6	26.9	27.9	28.2	26.6	27.7	27.0	28.0	28.4
	4H	26.7	27.6	27.1	28.0	28.3	26.8	27.8	27.2	28.1	28.5
	6H	26.6	27.5	27.0	27.9	28.3	26.8	27.6	27.2	28.0	28.4
	8H	26.6	27.4	27.0	27.8	28.2	26.7	27.5	27.1	27.9	28.3
	12H	26.5	27.3	27.0	27.7	28.1	26.7	27.4	27.1	27.8	28.2
	8H 4H	26.7	27.5	27.1	27.9	28.3	26.8	27.6	27.2	28.0	28.4
	6H	26.6	27.3	27.1	27.7	28.2	26.8	27.4	27.2	27.8	28.3
	8H	26.6	27.2	27.1	27.6	28.1	26.7	27.3	27.2	27.8	28.2
	12H	26.6	27.1	27.1	27.5	28.0	26.7	27.2	27.2	27.7	28.2
	12H 4H	26.6	27.3	27.1	27.8	28.2	26.7	27.5	27.2	27.9	28.3
	6H	26.6	27.2	27.1	27.6	28.1	26.7	27.3	27.2	27.8	28.2
	8H	26.6	27.1	27.1	27.5	28.0	26.7	27.2	27.2	27.7	28.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H		+ 0.3 / - 0.6					+ 0.3 / - 0.5				
2.0H		+ 0.5 / - 0.5					+ 0.5 / - 0.5				

CIE Pub.117, 12191 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.7)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

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

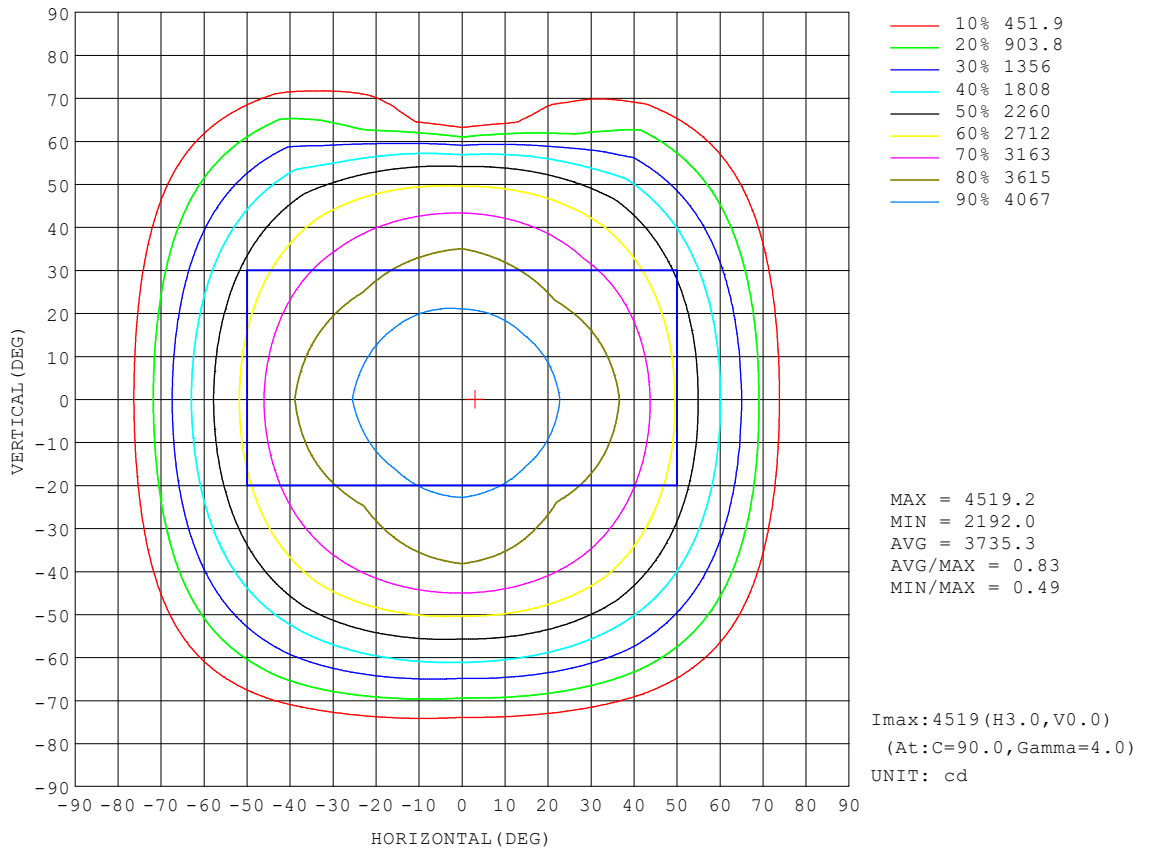
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	58	47	40	58	47	40	56	46	40	33
0.80	69	58	51	68	57	50	66	56	50	43
1.00	78	67	60	77	67	60	74	68	59	52
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	74	85	78	72	65
2.00	97	89	83	95	88	82	91	85	80	73
2.50	100	93	88	98	92	87	94	89	85	76
3.00	104	97	92	101	96	91	97	93	89	80
4.00	107	102	98	105	100	96	100	97	94	85
5.00	109	105	101	107	103	100	102	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

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

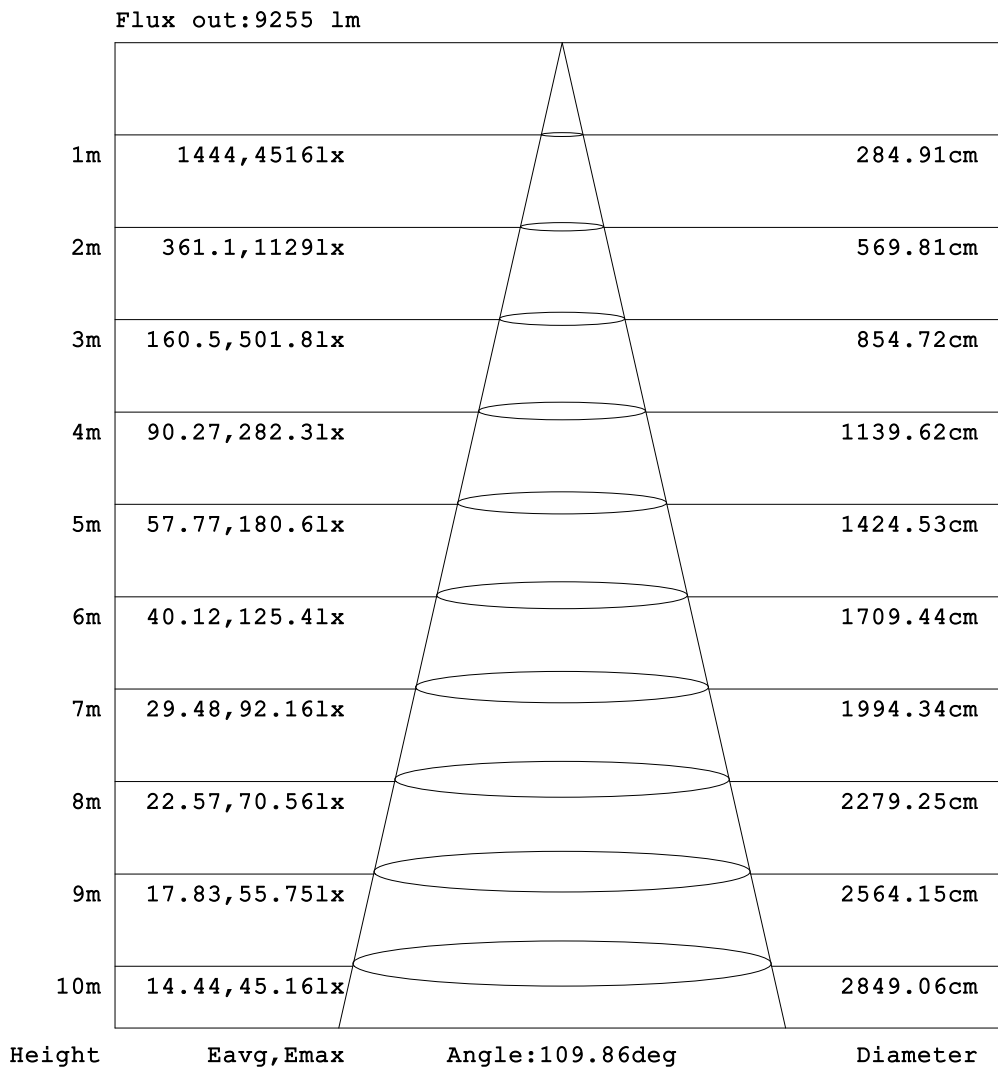


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

AAI Figure

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



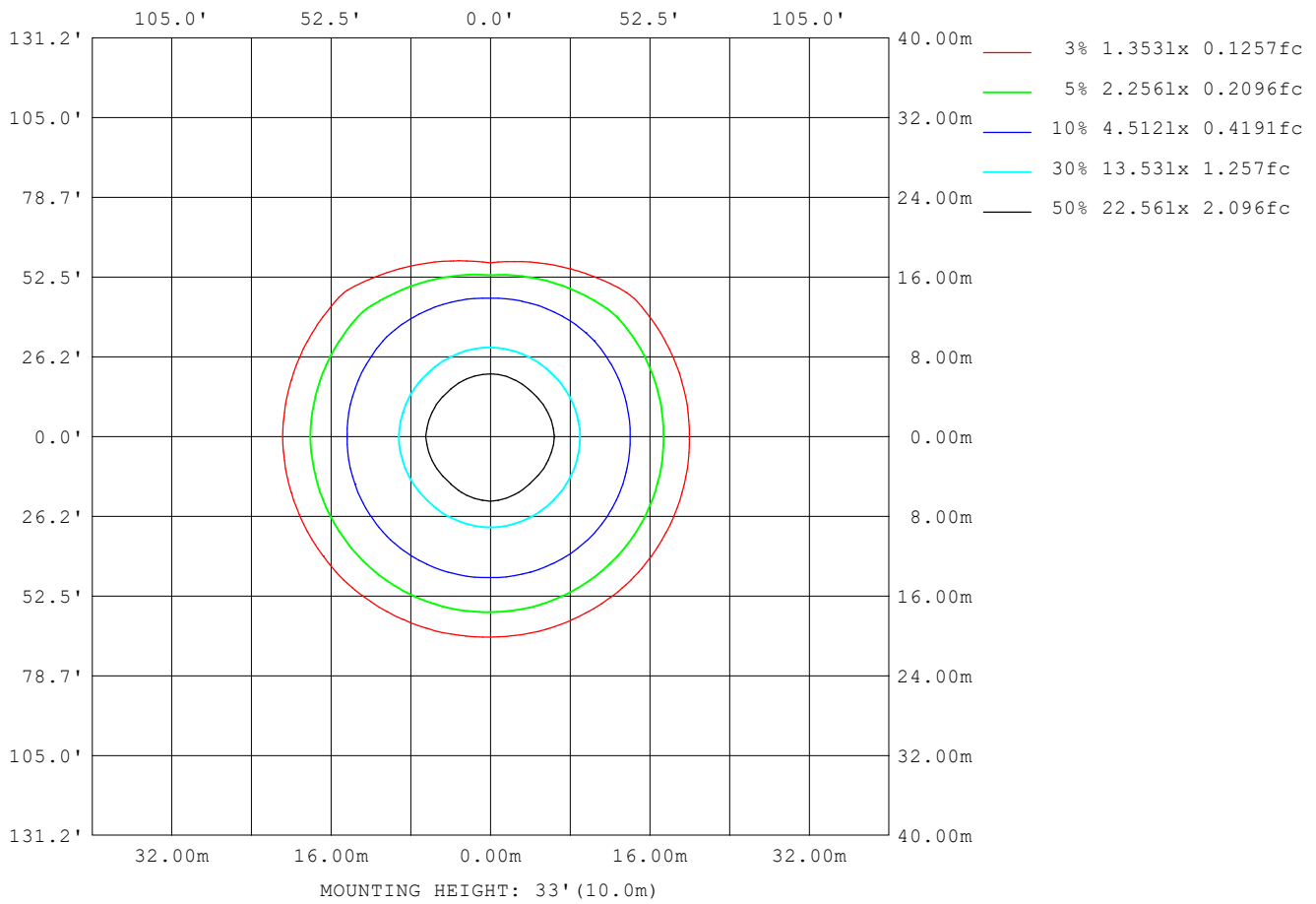
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

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



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

LED Avg.L Report

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

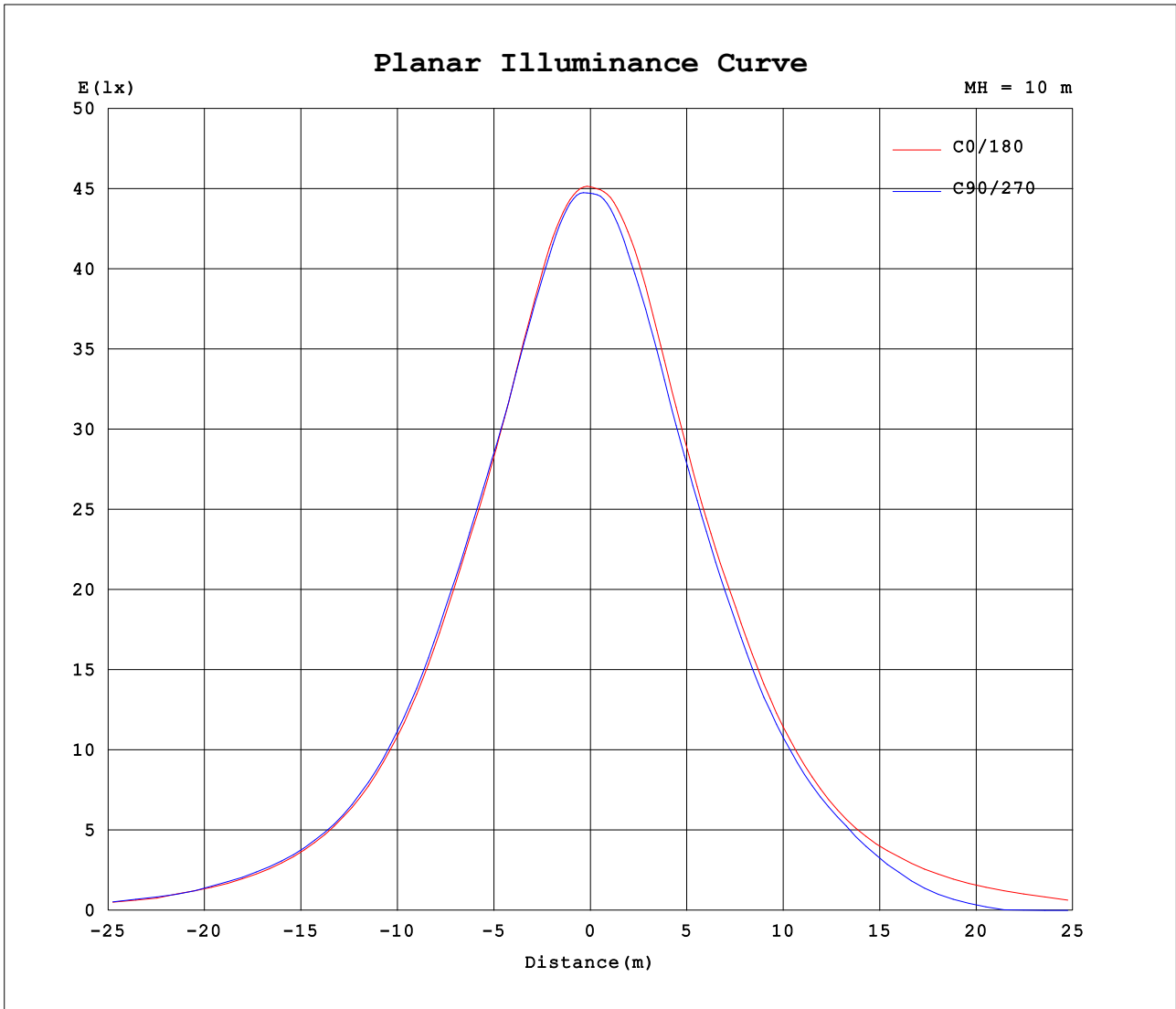
AvgL	cd/m2
L_0~180 (65) av	350323
L_0~180 (75) av	183423
L_0~180 (85) av	23274
L_90~270 (65) av	165863
L_90~270 (75) av	75588
L_90~270 (85) av	16457
L_45 (65) av	345184
L_45 (75) av	180176
L_45 (85) av	24152

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [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	45	90	135	180	225	270	315										
0	4483	4483	4483	4483	4483	4483	4483	4483										
5	4484	4491	4500	4500	4489	4478	4470	4473										
10	4425	4423	4426	4457	4459	4433	4378	4387										
15	4298	4295	4297	4361	4380	4322	4257	4268										
20	4140	4111	4161	4190	4220	4170	4111	4117										
25	3975	3903	4025	3978	4058	3963	3946	3906										
30	3832	3692	3927	3764	3890	3748	3801	3687										
35	3676	3509	3776	3569	3750	3540	3625	3472										
40	3393	3356	3514	3404	3536	3328	3371	3274										
45	3052	3138	3175	3214	3218	3120	3062	3058										
50	2648	2792	2757	2902	2844	2832	2678	2735										
55	2235	2366	2328	2485	2437	2457	2130	2344										
60	1804	1870	1920	2030	2059	2014	1120	1869										
65	1351	1415	1346	1550	1611	1540	55.6	1329										
70	817	890	854	1089	1053	1054	17.9	897										
75	366	398	380	498	583	558	11.0	411										
80	90.2	74.8	70.6	135	212	193	3.60	103										
85	17.3	19.6	24.4	23.7	23.2	24.6	4.31	16.3										
90	6.80	9.16	9.84	9.01	11.1	11.6	5.70	6.75										
95	9.30	10.7	8.49	9.83	9.39	9.38	8.68	10.1										
100	13.6	13.9	7.68	12.6	13.9	13.3	12.3	14.5										
105	18.3	17.7	9.74	16.1	19.1	17.8	16.2	19.0										
110	23.1	21.9	14.8	20.1	24.4	22.2	20.3	23.3										
115	28.1	26.6	21.3	24.5	29.6	26.7	25.0	28.0										
120	33.2	31.2	27.2	28.9	34.8	31.3	29.9	32.5										
125	37.6	35.5	31.7	32.9	39.7	35.5	34.8	36.7										
130	41.3	39.3	36.3	36.5	43.7	39.2	39.1	40.5										
135	44.5	43.0	40.4	40.0	46.9	42.6	43.1	43.8										
140	47.3	46.2	43.9	43.5	49.7	45.9	46.7	46.8										
145	49.6	49.4	46.9	46.5	52.1	48.8	49.4	49.3										
150	52.2	53.0	50.5	49.5	54.1	51.4	51.7	51.4										
155	54.9	56.3	54.3	52.2	56.5	53.5	54.0	53.2										
160	57.7	59.1	56.6	54.7	59.2	55.7	56.4	55.2										
165	61.1	61.9	58.8	57.1	62.2	58.1	59.4	57.5										
170	65.3	64.5	62.2	59.7	65.6	61.1	62.7	60.3										
175	67.9	65.5	65.3	62.0	68.1	63.6	66.4	62.3										
180	68.9	65.6	67.6	63.7	69.1	65.5	67.8	63.6										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks: