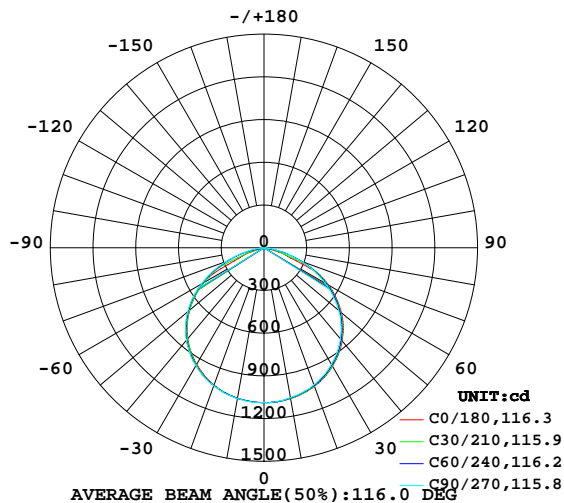


LUMINAIRE PHOTOMETRIC TEST REPORT

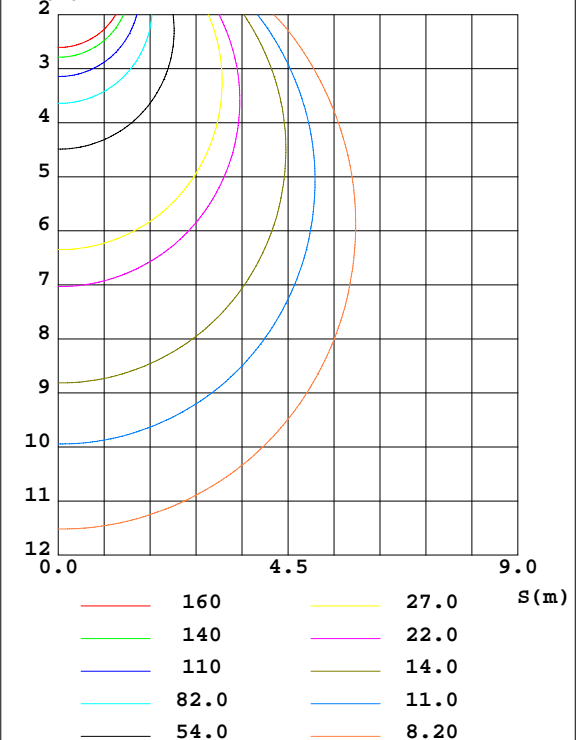
Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 50.63 lm/W			
MODEL		Imax(cd)	1091	S/MH(C0/180)	1.29
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3083.9	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	3083.88	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

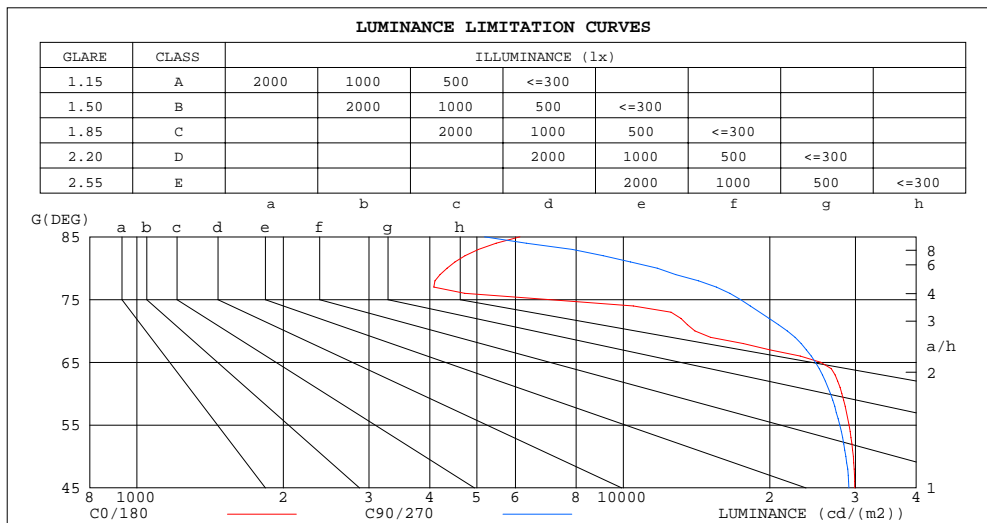
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	1075	1074	1068	1074	1072	1074	1076	1077	0- 10	103.3	103.3	3.35,3.35
20	1036	1031	1024	1027	1026	1029	1032	1037	10- 20	298.4	401.7	13,13
30	961.8	957.4	946.8	948.8	945.6	952.2	956.3	964.7	20- 30	459.7	861.4	27.9,27.9
40	853.1	845.5	834.8	834.1	832.8	838.2	847.7	854.8	30- 40	565.1	1427	46.3,46.3
50	710.4	697.1	685.4	685.2	681.8	684.0	699.3	709.5	40- 50	596.2	2023	65.6,65.6
60	523.4	504.8	496.0	490.6	485.3	487.2	507.0	523.0	50- 60	538.1	2561	83,83
70	178.6	286.7	276.5	260.9	151.3	255.5	284.5	297.7	60- 70	372.0	2933	95.1,95.1
80	28.05	28.65	75.87	19.64	22.95	19.98	81.08	28.36	70- 80	131.0	3064	99.3,99.3
90	8.505	5.739	1.770	2.620	4.424	3.742	2.826	6.684	80- 90	20.08	3084	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6129	5186
80	4342	11745
75	7022	17419
70	14034	21735
65	25458	24823
60	28138	26666
55	29099	27866
50	29709	28666
45	29898	29080

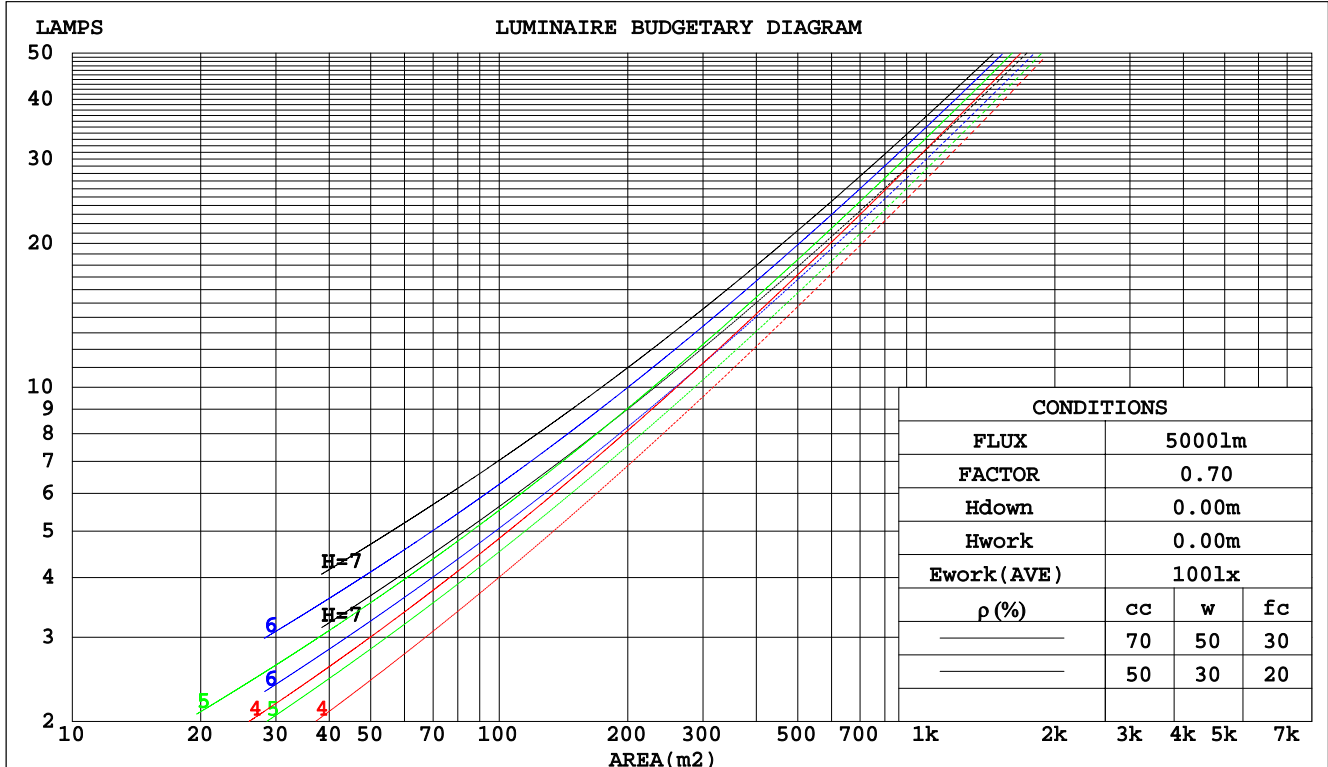
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.88	.86
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.77	.84	.79	.76	.81	.77	.74	.72
3.0	.81	.73	.67	.80	.72	.66	.77	.70	.65	.74	.69	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.49	.61	.54	.48	.59	.53	.47	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.48	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.33	.47	.39	.33	.46	.38	.33	.44	.38	.33	.43	.37	.33	.31
9.0	.44	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.29	.28
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	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	.284	.162	.051	.277	.158	.050	.264	.151	.048	.252	.145	.047	.241	.140	.045		
2.0	.275	.151	.046	.269	.148	.046	.257	.143	.044	.247	.138	.043	.237	.134	.042		
3.0	.259	.138	.041	.253	.136	.041	.243	.132	.040	.234	.128	.039	.225	.124	.039		
4.0	.241	.125	.037	.237	.124	.037	.228	.121	.036	.219	.118	.035	.211	.115	.035		
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032		
6.0	.210	.105	.030	.206	.104	.030	.199	.102	.030	.192	.100	.029	.186	.098	.029		
7.0	.196	.097	.027	.192	.096	.027	.186	.094	.027	.180	.092	.027	.174	.091	.027		
8.0	.183	.090	.025	.180	.089	.025	.175	.087	.025	.169	.086	.025	.164	.084	.025		
9.0	.172	.083	.023	.170	.083	.023	.164	.081	.023	.160	.080	.023	.155	.079	.023		
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.147	.074	.021		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.179	.156	.136	.153	.134	.117	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.091	.061	.036	.053	.036	.022	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.116	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm											
NAME:			TYPE:			WEIGHT:					
SPEC.:			DIM.: 1506*44*75			SERIAL No.:					
MFR.: A4673444-01			SUR.:1.065*0.035			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	24.9	26.4	25.1	26.6	26.8	24.6	26.1	24.9	26.3	26.5	
	3H	25.7	27.1	26.0	27.3	27.6	25.9	27.3	26.2	27.5	27.8
	4H	25.8	27.1	26.1	27.3	27.6	26.3	27.6	26.6	27.9	28.1
	6H	25.7	26.9	26.0	27.2	27.5	26.5	27.7	26.8	28.0	28.3
	8H	25.7	26.9	26.0	27.1	27.4	26.5	27.7	26.8	28.0	28.2
12H	25.7	26.8	26.0	27.1	27.4	26.5	27.6	26.8	27.9	28.2	
4H	2H	25.4	26.7	25.7	27.0	27.2	25.2	26.5	25.5	26.8	27.0
	3H	26.4	27.5	26.7	27.8	28.1	26.7	27.8	27.0	28.1	28.4
	4H	26.5	27.5	26.9	27.8	28.2	27.2	28.2	27.5	28.5	28.8
	6H	26.4	27.3	26.8	27.7	28.1	27.4	28.3	27.8	28.7	29.0
	8H	26.4	27.3	26.8	27.6	28.0	27.4	28.3	27.8	28.6	29.0
	12H	26.4	27.2	26.8	27.6	28.0	27.4	28.2	27.8	28.6	29.0
8H	4H	26.6	27.4	27.0	27.8	28.2	27.2	28.0	27.6	28.4	28.8
	6H	26.5	27.2	27.0	27.6	28.1	27.5	28.2	27.9	28.6	29.0
	8H	26.5	27.2	27.0	27.6	28.0	27.5	28.2	28.0	28.6	29.0
	12H	26.6	27.1	27.0	27.5	28.0	27.6	28.1	28.0	28.5	29.0
12H	4H	26.5	27.3	27.0	27.7	28.1	27.2	27.9	27.6	28.3	28.7
	6H	26.5	27.1	27.0	27.6	28.0	27.5	28.1	27.9	28.5	28.9
	8H	26.5	27.0	27.0	27.5	28.0	27.5	28.0	28.0	28.5	29.0
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.2					
1.5H	+ 0.3 / - 0.6					+ 0.2 / - 0.4					
2.0H	+ 0.4 / - 0.9					+ 0.3 / - 0.4					

CIE Pub.117, 3084 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.9$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:

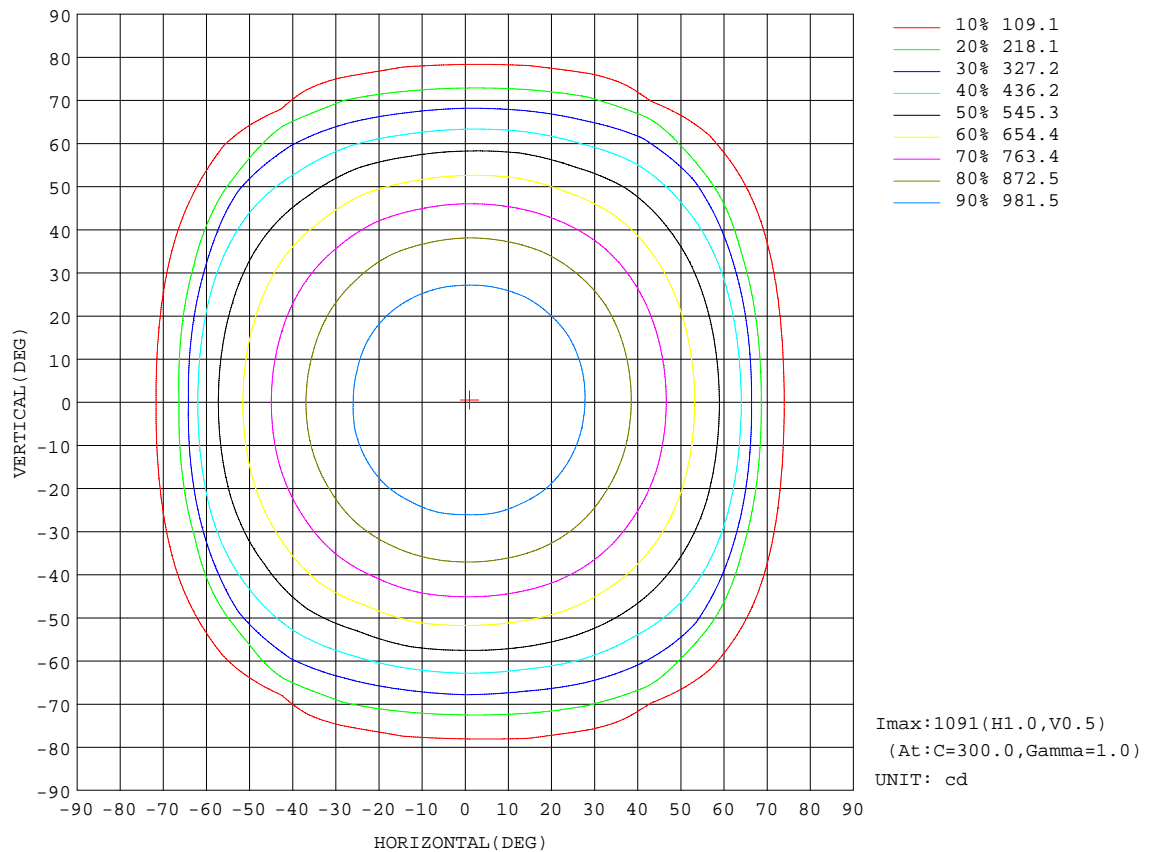
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	46	40	56	46	39	33
0.80	69	57	50	67	57	50	66	56	49	42
1.00	77	67	59	76	66	59	74	67	59	52
1.25	85	74	68	83	74	67	81	72	66	59
1.50	90	80	73	88	79	73	85	78	72	65
2.00	96	88	82	95	87	82	91	85	80	73
2.50	100	93	87	98	92	86	95	89	84	76
3.00	104	97	92	101	96	91	97	93	89	81
4.00	107	102	98	105	100	96	101	97	94	85
5.00	110	105	101	107	103	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:

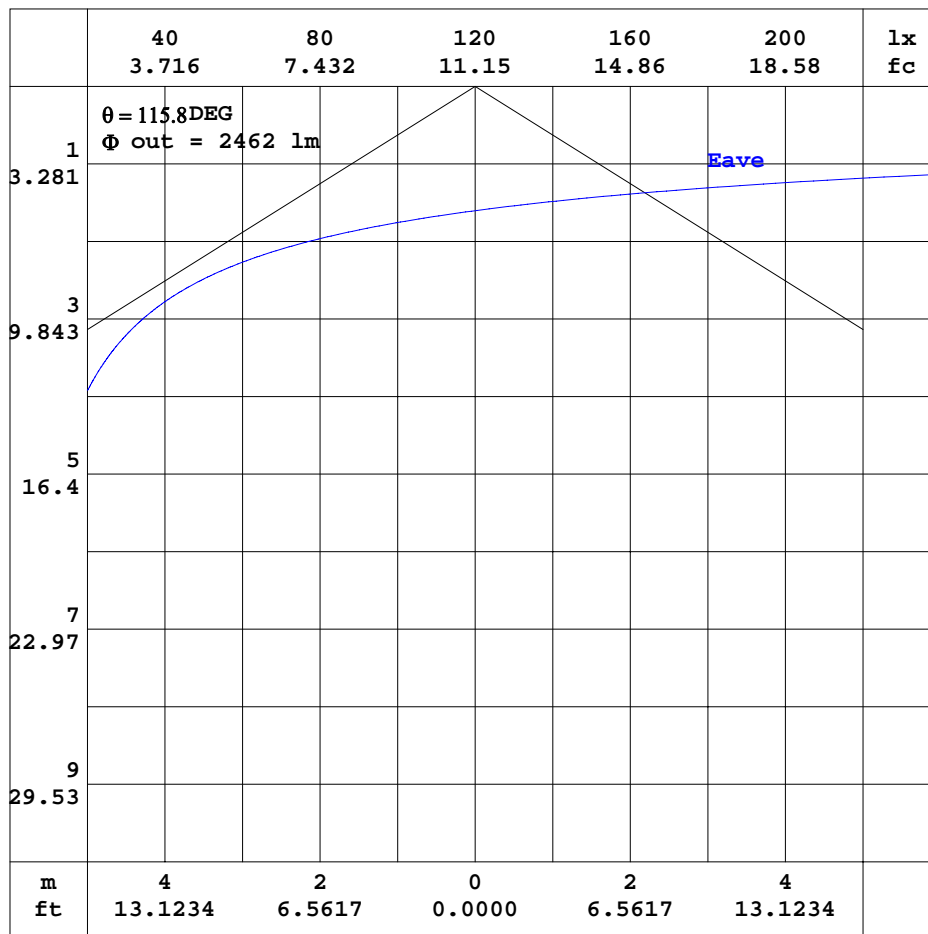


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

AAI CURVES

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:



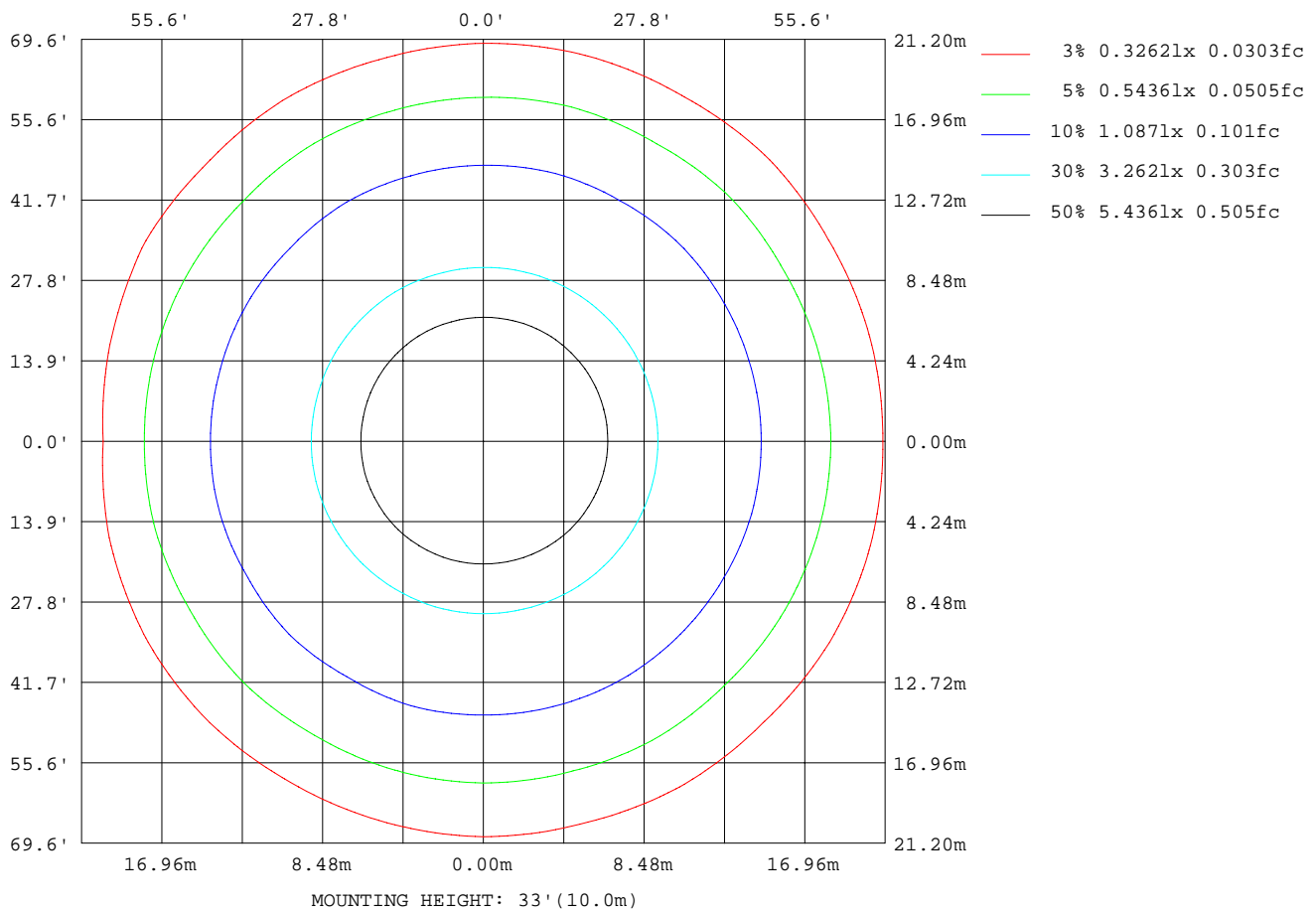
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity: 65.0%
 Test Distance: 11.700m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:229.77V I:0.2701A P:60.911W PF:0.9813 Freq:49.99Hz Lamp Flux:3083.88x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1506*44*75	SERIAL No.:
MFR.: A4673444-01	SUR.:1.065*0.035	Shielding Angle:

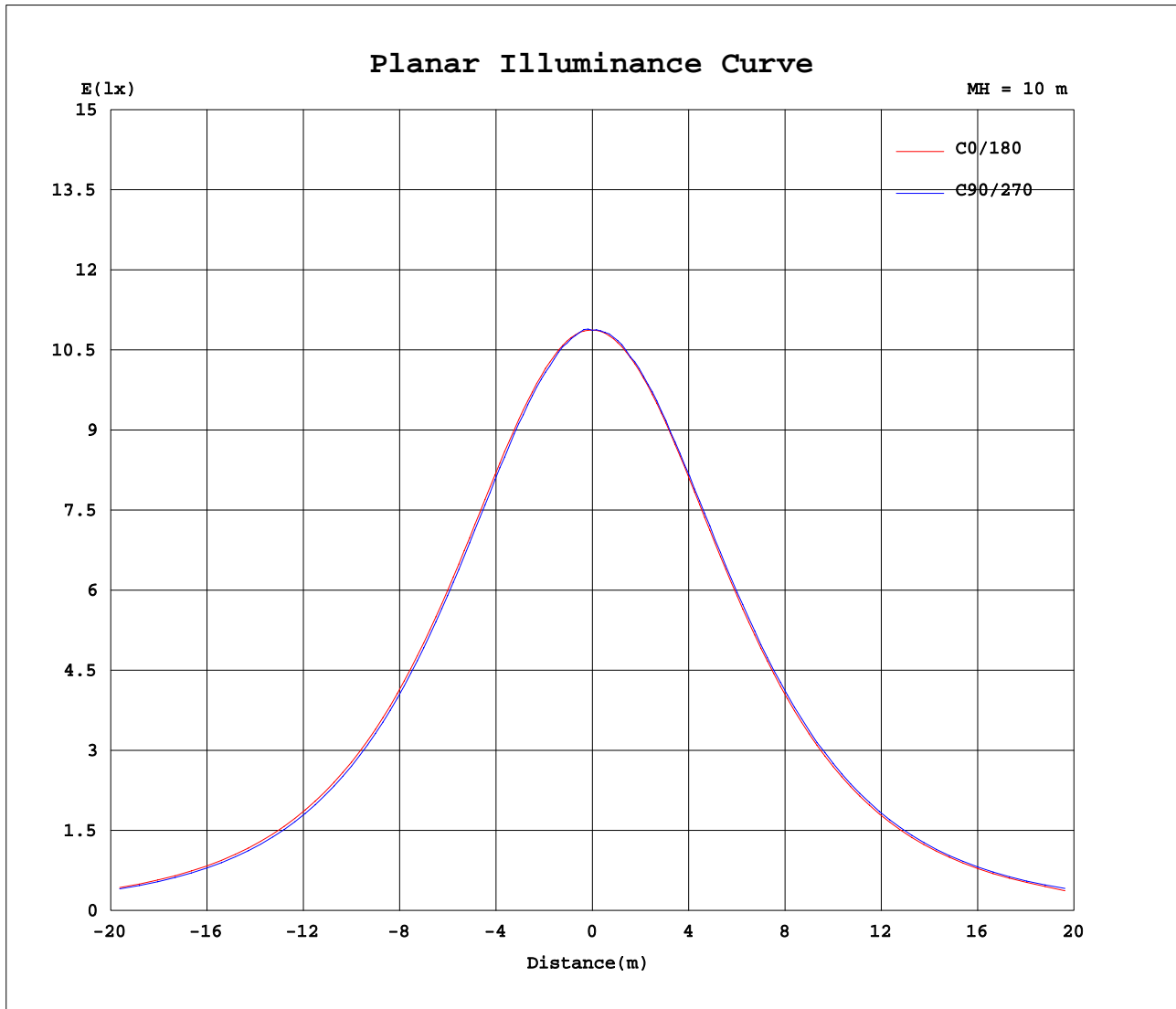
AvgL	cd/m2
L_0~180(65)av	21590
L_0~180(75)av	5145
L_0~180(85)av	5510
L_90~270(65)av	25112
L_90~270(75)av	17711
L_90~270(85)av	5832
L_45(65)av	24877
L_45(75)av	10842
L_45(85)av	4444

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-09-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```