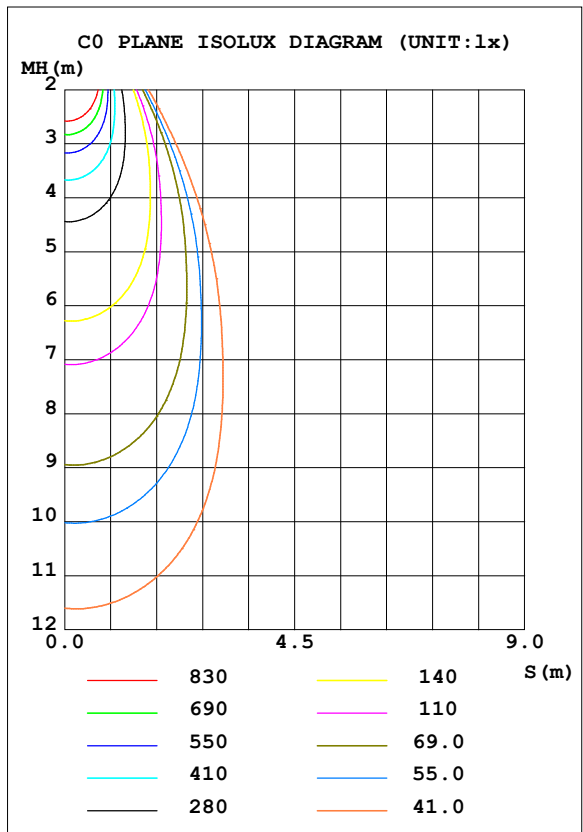
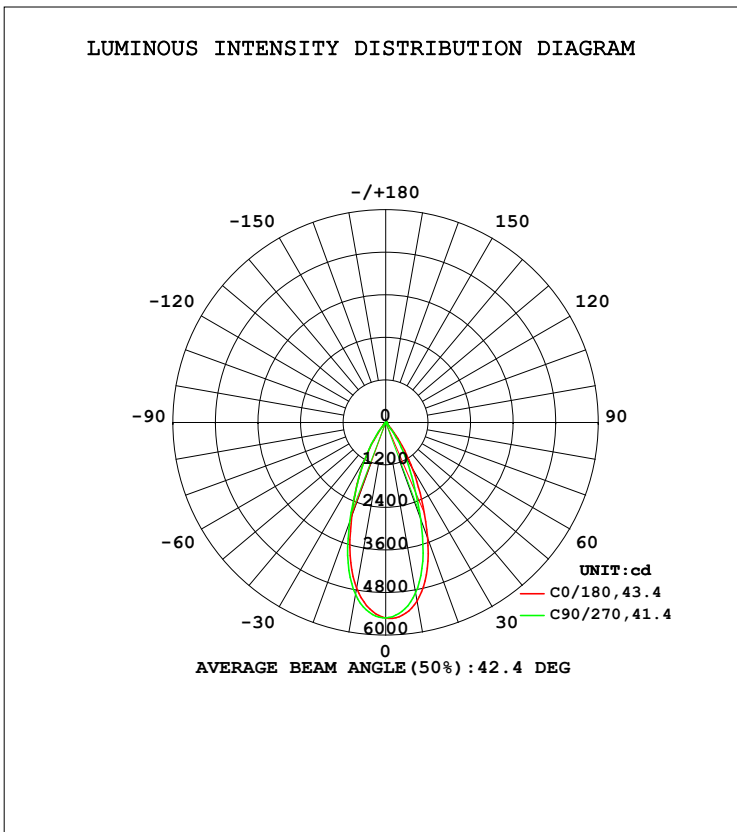


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		I _{max} (cd)	5532	S/MH (C0/180)	0.66
NOMINAL POWER (W)	20	LOR (%)	100.0	S/MH (C90/270)	0.67
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	3038.8	η UP, DN (C0-180)	0.0, 52.4
NOMINAL FLUX (lm)	3038.82	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 47.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230.0	η down (%)	100.0	CIBSE SHR MAX	0.70

Eff: 149.17 lm/W



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HFY
 Test Date: 16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity: 65%
 Test Distance: 5.744m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

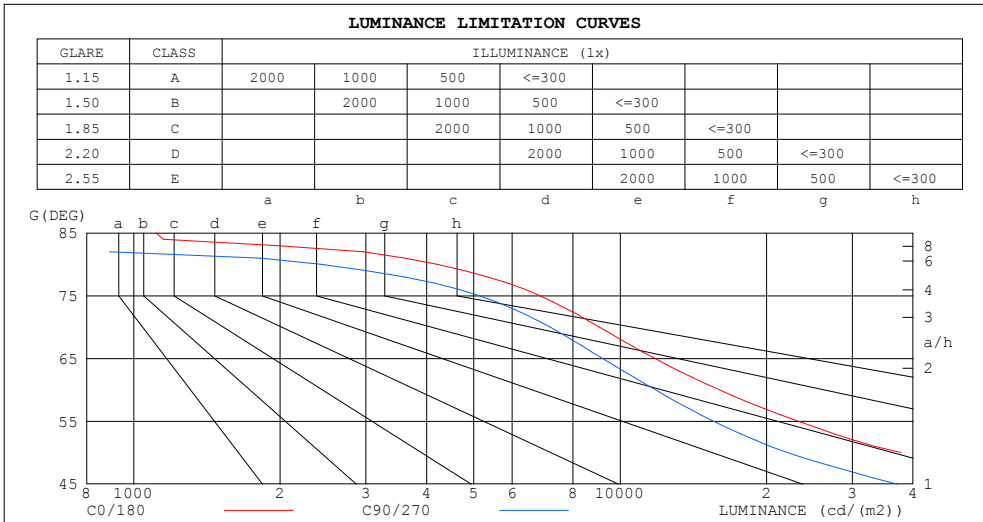
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	5112	4881	4744	4924				0- 10	498.0	498.0	16.4,16.4
20	3462	2887	2808	2955				10- 20	1124	1622	53.4,53.4
30	1548	1094	1130	1131				20- 30	924.4	2547	83.8,83.8
40	302.0	147.8	168.6	157.0				30- 40	384.6	2931	96.5,96.5
50	58.22	33.99	43.92	33.38				40- 50	70.25	3001	98.8,98.8
60	19.17	14.19	15.21	13.81				50- 60	23.26	3025	99.5,99.5
70	7.436	5.887	5.589	5.954				60- 70	10.14	3035	99.9,99.9
80	1.751	1.008	0.6913	1.305				70- 80	3.689	3038	100,100
90	0.1578	0.1350	0.1521	0.1502				80- 90	0.3678	3039	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: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1112	781
80	4203	2420
75	6835	5126
70	9059	7172
65	11789	9195
60	15976	11822
55	23186	15533
50	37741	22034
45	69879	37092

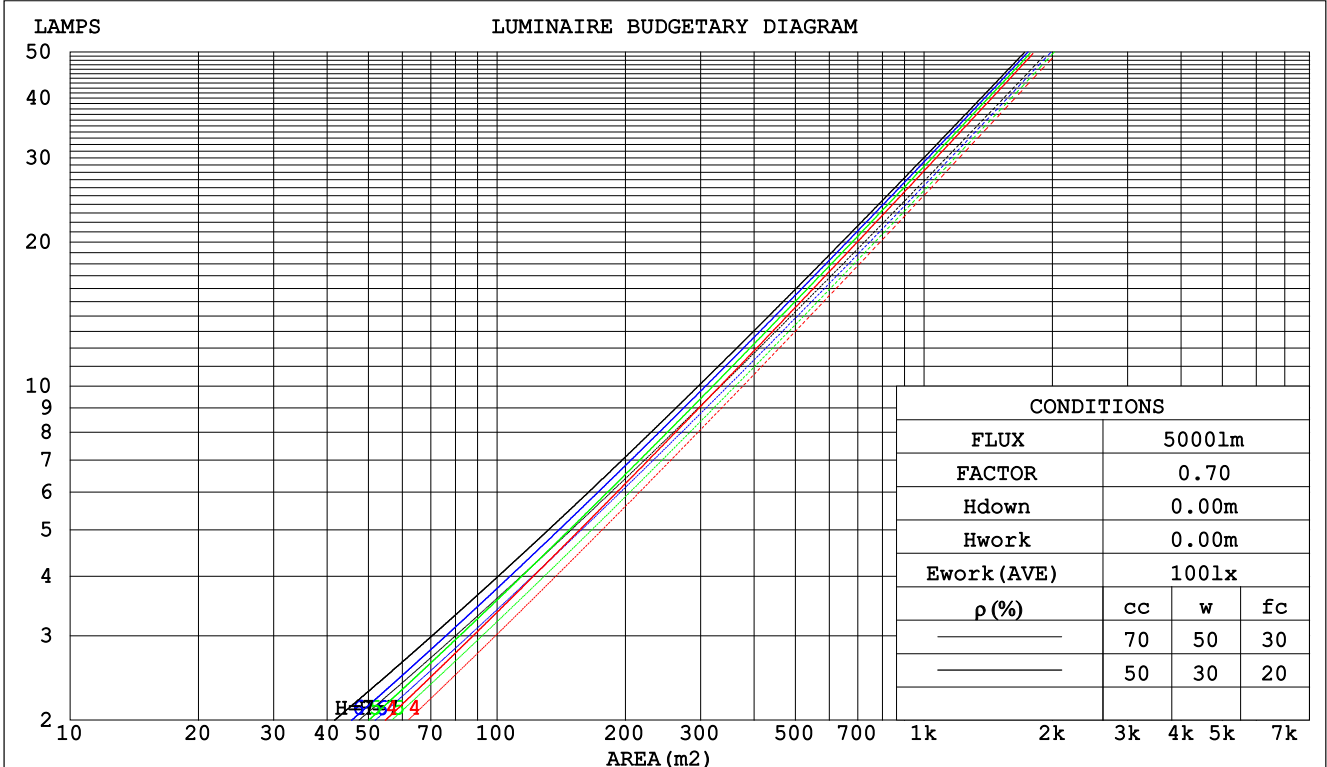
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	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	1.12	1.09	1.07	1.09	1.07	1.06	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95
2.0	1.05	1.01	.98	1.03	.90	.97	.90	.97	.95	.97	.95	.93	.94	.93	.91	.89
3.0	.99	.94	.91	.97	.93	.90	.95	.91	.89	.92	.90	.87	.90	.88	.86	.84
4.0	.93	.88	.85	.92	.88	.84	.90	.86	.83	.88	.85	.82	.86	.84	.81	.80
5.0	.88	.83	.79	.87	.83	.79	.86	.81	.78	.84	.80	.78	.83	.79	.77	.76
6.0	.84	.79	.75	.83	.78	.74	.82	.77	.74	.80	.76	.73	.79	.76	.73	.72
7.0	.80	.74	.71	.79	.74	.70	.78	.73	.70	.77	.73	.70	.76	.72	.69	.68
8.0	.76	.71	.67	.75	.70	.67	.74	.70	.67	.73	.69	.66	.72	.69	.66	.65
9.0	.72	.67	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.69	.66	.63	.62
10.0	.69	.64	.61	.69	.64	.61	.68	.64	.60	.67	.63	.60	.67	.63	.60	.59



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	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	.163	.092	.029	.156	.089	.028	.143	.082	.026	.132	.076	.024	.121	.070	.023	
2.0	.154	.084	.026	.149	.082	.025	.138	.077	.024	.128	.072	.023	.120	.068	.021	
3.0	.146	.078	.023	.141	.076	.023	.132	.072	.022	.124	.068	.021	.117	.065	.020	
4.0	.138	.072	.021	.134	.070	.021	.127	.067	.020	.120	.064	.019	.113	.062	.019	
5.0	.132	.067	.019	.128	.066	.019	.122	.063	.019	.116	.061	.018	.110	.059	.018	
6.0	.126	.063	.018	.123	.062	.018	.117	.060	.017	.111	.058	.017	.106	.056	.017	
7.0	.120	.059	.017	.117	.058	.017	.112	.057	.016	.108	.055	.016	.103	.054	.016	
8.0	.115	.056	.016	.113	.055	.016	.108	.054	.015	.104	.053	.015	.100	.051	.015	
9.0	.110	.053	.015	.108	.053	.015	.104	.051	.015	.100	.050	.014	.097	.049	.014	
10.0	.106	.051	.014	.104	.050	.014	.100	.049	.014	.097	.048	.014	.094	.047	.014	

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	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.141	.113	.092	.121	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.112	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.012	.009	.006	
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.059	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.090	.053	.029	.078	.046	.025	.054	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm										
NAME: FT1080B					TYPE:			WEIGHT:		
SPEC.:3000K 36D					DIM.:			SERIAL No.:1		
MFR.:					SUR.:55			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	19.3	20.2	19.5	20.3	20.5	17.5	18.4	17.7	18.5	18.7
3H	19.2	20.0	19.4	20.2	20.4	17.4	18.2	17.6	18.4	18.6
4H	19.1	19.8	19.4	20.1	20.3	17.3	18.1	17.6	18.3	18.5
6H	19.0	19.7	19.3	20.0	20.2	17.2	17.9	17.5	18.2	18.4
8H	19.0	19.7	19.3	19.9	20.2	17.2	17.9	17.5	18.1	18.4
12H	18.9	19.6	19.3	19.8	20.1	17.1	17.8	17.5	18.0	18.3
4H 2H	19.1	19.8	19.4	20.0	20.3	17.3	18.0	17.6	18.3	18.5
3H	19.0	19.6	19.3	19.9	20.1	17.2	17.8	17.5	18.1	18.4
4H	18.9	19.5	19.2	19.8	20.1	17.1	17.7	17.5	18.0	18.3
6H	18.8	19.3	19.2	19.6	20.0	17.0	17.5	17.4	17.9	18.2
8H	18.7	19.2	19.1	19.6	19.9	17.0	17.4	17.4	17.8	18.2
12H	18.7	19.1	19.1	19.5	19.9	16.9	17.4	17.3	17.7	18.1
8H 4H	18.7	19.2	19.1	19.6	19.9	17.0	17.4	17.4	17.8	18.2
6H	18.6	19.0	19.1	19.4	19.8	16.9	17.3	17.3	17.7	18.1
8H	18.6	18.9	19.0	19.4	19.8	16.8	17.2	17.3	17.6	18.0
12H	18.5	18.8	19.0	19.3	19.7	16.8	17.1	17.2	17.5	18.0
12H 4H	18.7	19.1	19.1	19.5	19.9	16.9	17.4	17.3	17.7	18.1
6H	18.6	18.9	19.0	19.4	19.8	16.8	17.2	17.3	17.6	18.0
8H	18.5	18.8	19.0	19.3	19.7	16.8	17.1	17.2	17.5	18.0
Variations with the observer position at spacings:										
S = 1.0H	+ 4.2 / - 8.2					+ 3.3 / - 7.1				
1.5H	+ 6.5 / - 7.1					+ 5.5 / - 5.7				
2.0H	+ 5.3 / - 3.7					+ 3.5 / - 2.6				

CIE Pub.117, 3039 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.9)
 Area: 0.0024 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:

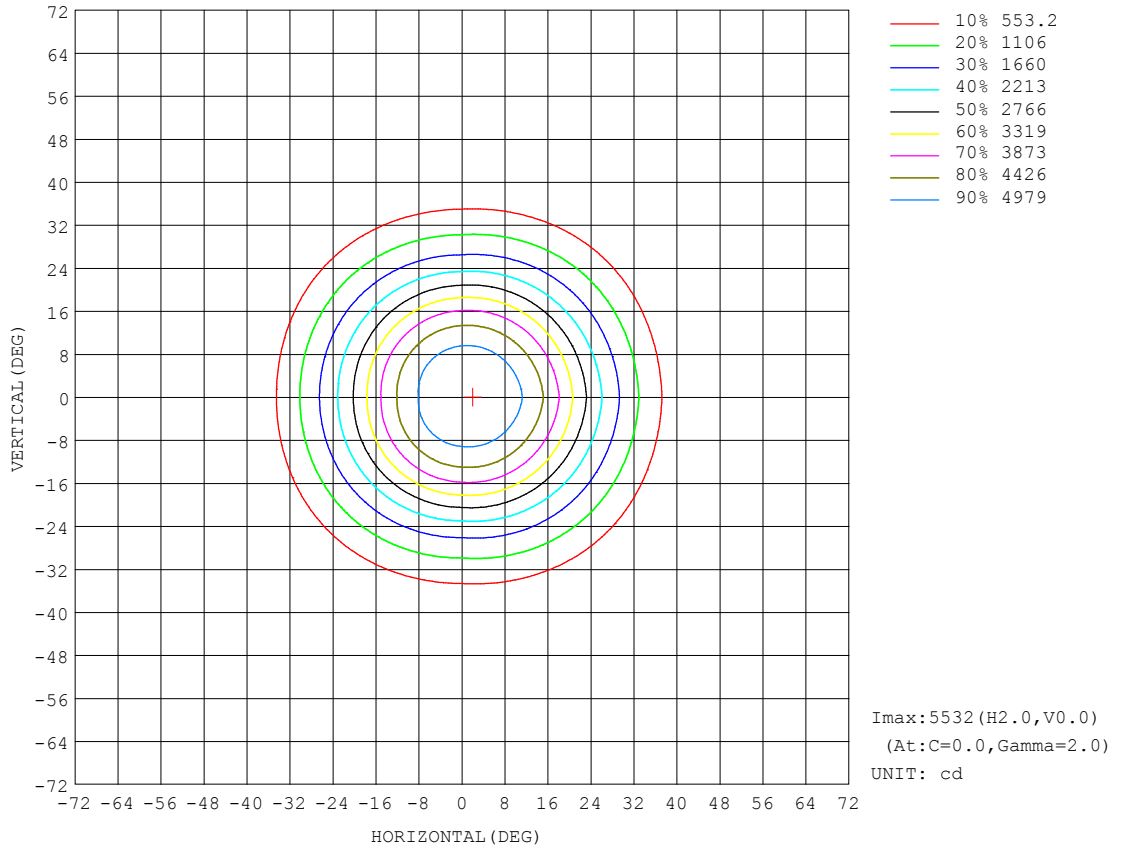
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	89	83	80	89	83	80	88	83	80	76
0.80	97	91	88	96	91	87	95	90	87	84
1.00	101	95	92	100	95	92	98	95	91	87
1.25	104	99	96	103	99	96	101	98	95	91
1.50	107	102	99	106	102	99	104	100	98	93
2.00	109	105	102	108	104	102	105	102	100	95
2.50	111	107	104	109	106	104	106	104	102	96
3.00	112	109	106	111	108	105	107	105	103	97
4.00	114	112	110	112	110	108	109	107	105	98
5.00	115	113	112	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:

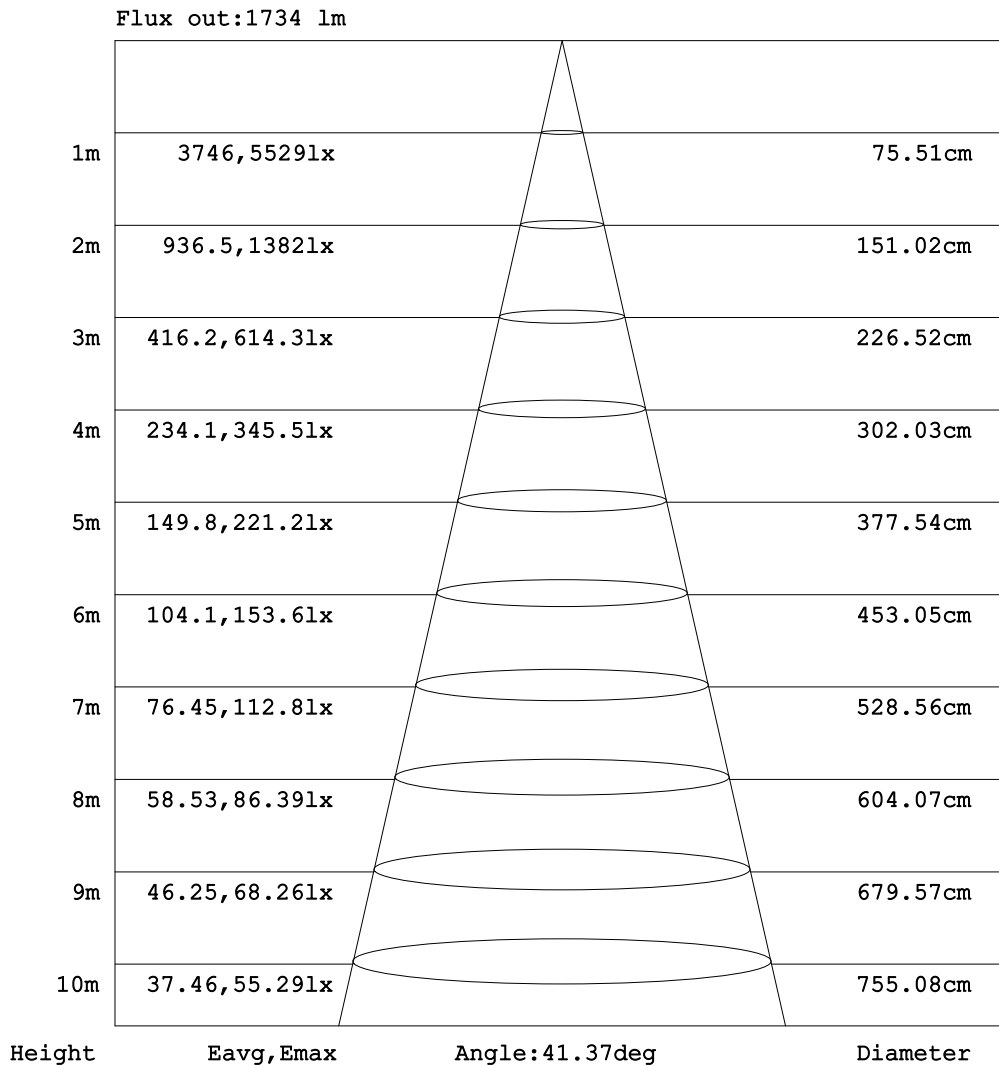


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:



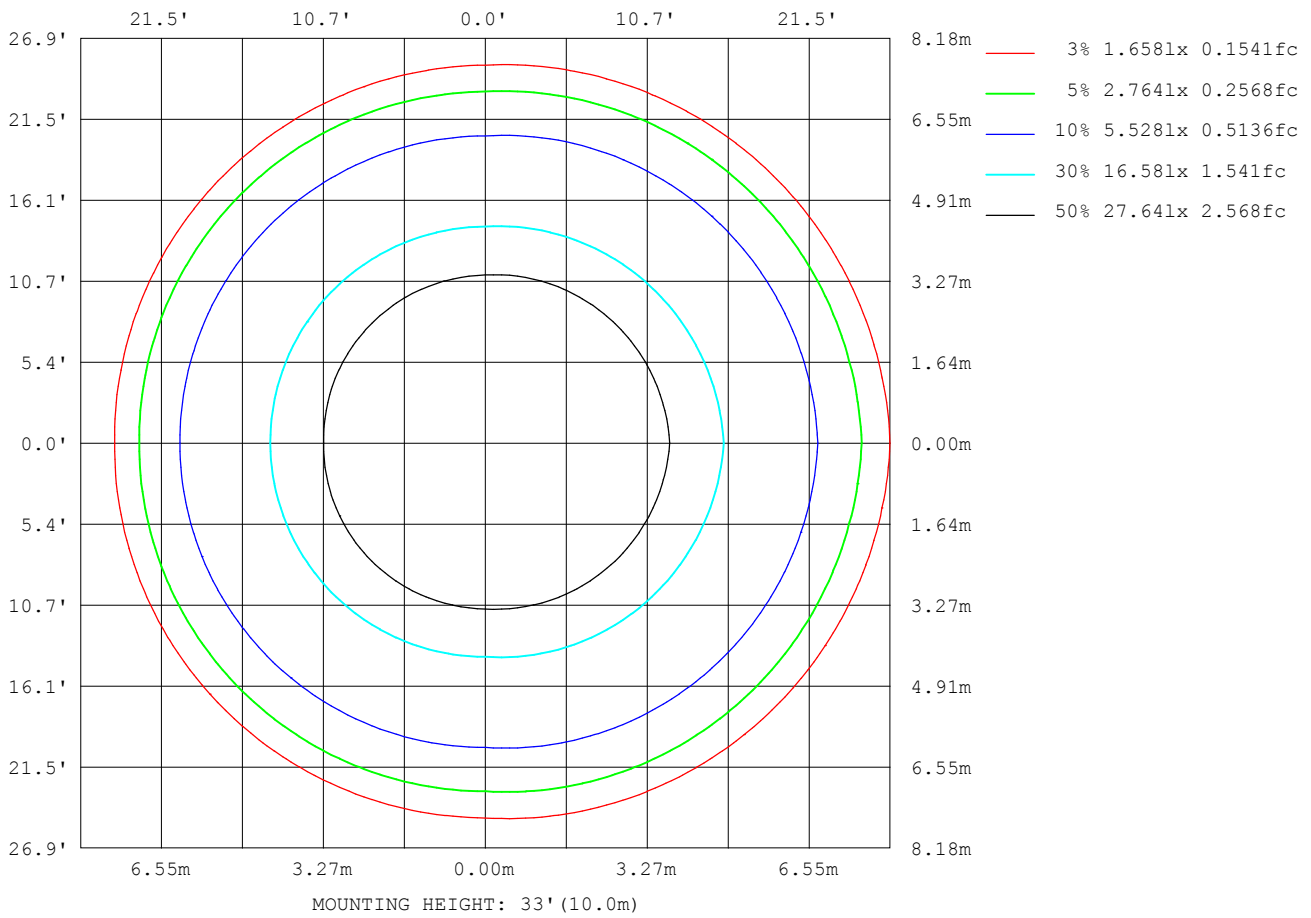
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HFY
 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:

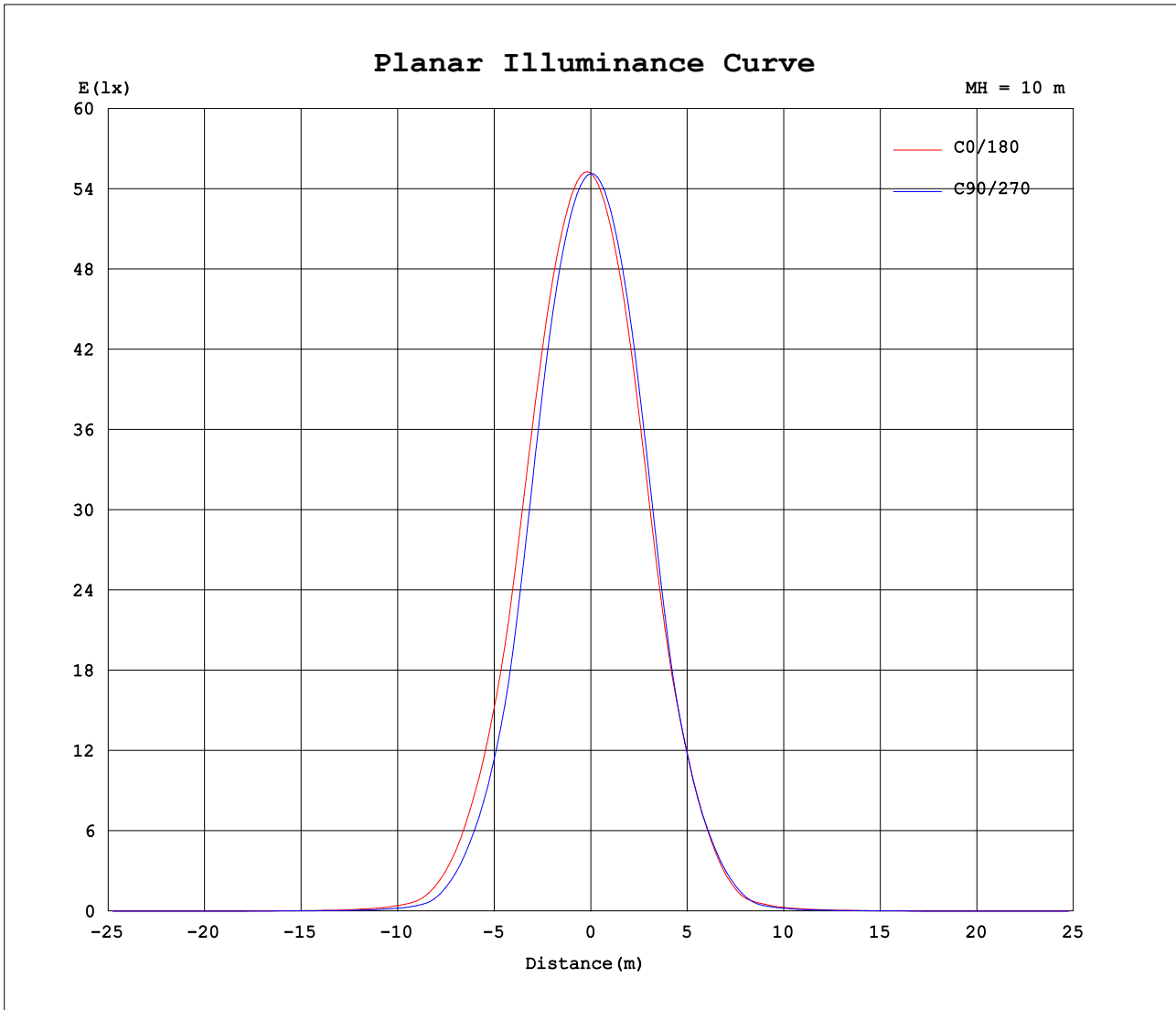
AvgL	cd/m2
L_0~180 (65) av	10496
L_0~180 (75) av	5672
L_0~180 (85) av	960
L_90~270 (65) av	9148
L_90~270 (75) av	5310
L_90~270 (85) av	877
L_45 (65) av	9573
L_45 (75) av	5373
L_45 (85) av	899

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
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 Test Date:16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity:65%
 Test Distance:5.744m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HFY
 Test Date: 16 March 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.417
 Humidity: 65%
 Test Distance: 5.744m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.35V I:0.0948A P:20.372W PF:0.9326 Freq:49.99Hz Lamp Flux:3038.82x1 lm		
NAME: FT1080B	TYPE:	WEIGHT:
SPEC.:3000K 36D	DIM.:	SERIAL No.:1
MFR.:	SUR.:55	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270														
0	5519	5516	5519	5516														
5	5460	5346	5273	5379														
10	5112	4881	4744	4924														
15	4450	4045	3886	4107														
20	3462	2887	2808	2955														
25	2403	1842	1904	1897														
30	1548	1094	1130	1131														
35	820	519	500	549														
40	302	148	169	157														
45	119	62.9	81.2	62.8														
50	58.2	34.0	43.9	33.4														
55	31.9	21.4	25.4	20.8														
60	19.2	14.2	15.2	13.8														
65	12.0	9.33	9.33	9.23														
70	7.44	5.89	5.59	5.95														
75	4.25	3.18	2.80	3.41														
80	1.75	1.01	0.69	1.31														
85	0.23	0.16	0.17	0.20														
90	0.16	0.13	0.15	0.15														

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 90.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.417
Temperature:25.3DEG	Humidity:65%
Operators:HFY	Test Distance:5.744m [K=1.0000]
Test Date:16 March 2024	Remarks: