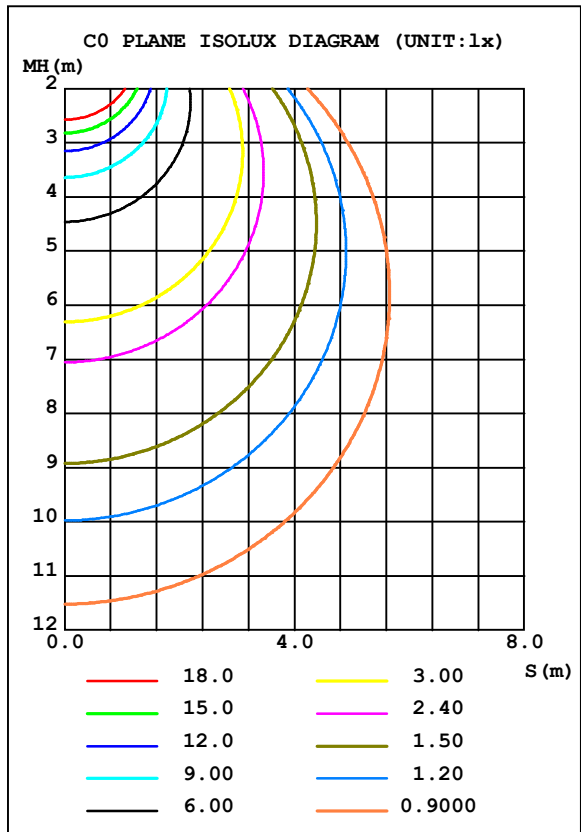
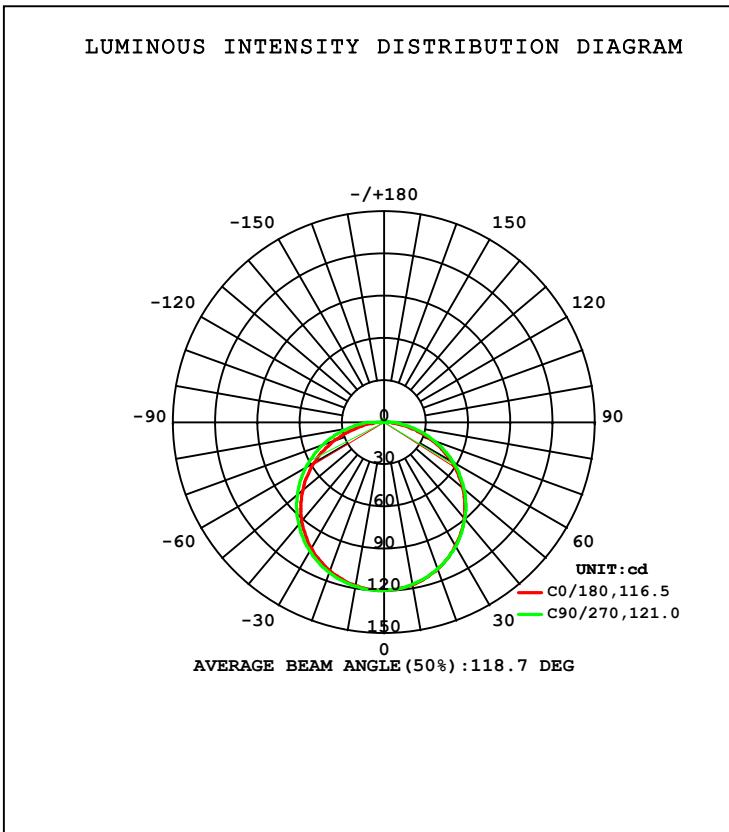


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 78.26 lm/W			
MODEL		I <sub>max</sub> (cd)	119.6	S/MH (C0/180)	1.29
NOMINAL POWER (W)	18	LOR (%)	100.0	S/MH (C90/270)	1.32
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	379.45	η UP, DN (C0-180)	1.1, 47.1
NOMINAL FLUX (lm)	379.452	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.3, 50.5
LAMPS INSIDE	1	η up (%)	2.4	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	24	η down (%)	97.6	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: CHM  
 Test Date: 2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 9.727m [K=1.0000]  
 Remarks: W 2400-2600K

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

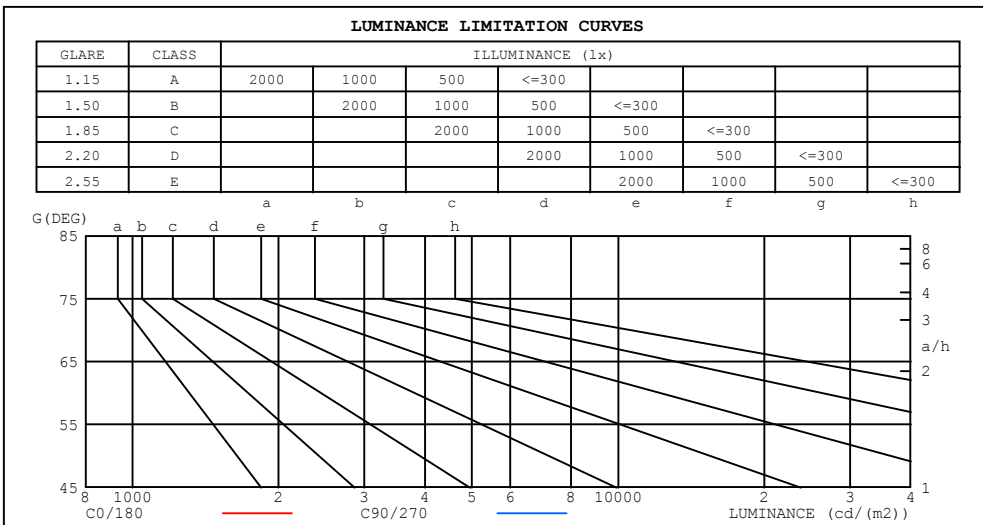
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	117.3	117.1	117.9	118.5					0- 10	11.32	11.32	2.98,2.98
20	111.3	111.1	112.6	113.9					10- 20	32.58	43.90	11.6,11.6
30	101.7	101.9	103.6	105.8					20- 30	49.86	93.76	24.7,24.7
40	88.90	89.58	91.26	94.66					30- 40	61.04	154.8	40.8,40.8
50	73.24	74.44	75.81	80.68					40- 50	64.73	219.5	57.9,57.9
60	55.17	56.92	57.56	64.26					50- 60	60.36	279.9	73.8,73.8
70	35.06	37.54	37.19	45.95					60- 70	48.34	328.2	86.5,86.5
80	14.50	18.20	16.32	26.72					70- 80	30.41	358.6	94.5,94.5
90	0.7009	5.498	0.9780	9.750					80- 90	11.75	370.4	97.6,97.6
100	0.5649	2.437	0.3463	2.292					90-100	2.605	373.0	98.3,98.3
110	0.6622	1.907	0.5046	2.127					100-110	1.453	374.5	98.7,98.7
120	0.7533	1.147	0.6624	1.877					110-120	1.200	375.7	99,99
130	0.8748	0.8754	0.8146	2.040					120-130	0.9747	376.6	99.3,99.3
140	1.002	0.9965	0.9539	2.345					130-140	0.9775	377.6	99.5,99.5
150	1.106	1.100	1.063	1.678					140-150	0.8077	378.4	99.7,99.7
160	1.197	1.185	1.155	1.349					150-160	0.5672	379.0	99.9,99.9
170	1.252	1.252	1.243	1.239					160-170	0.3496	379.3	100,100
180	1.282	1.282	1.282	1.288					170-180	0.1205	379.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

LUMINANCE LIMITATION CURVES

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	45557	79688
80	55660	69868
75	63381	71022
70	68346	73173
65	71433	74790
60	73554	75893
55	74950	76692
50	75964	77208
45	76762	77656

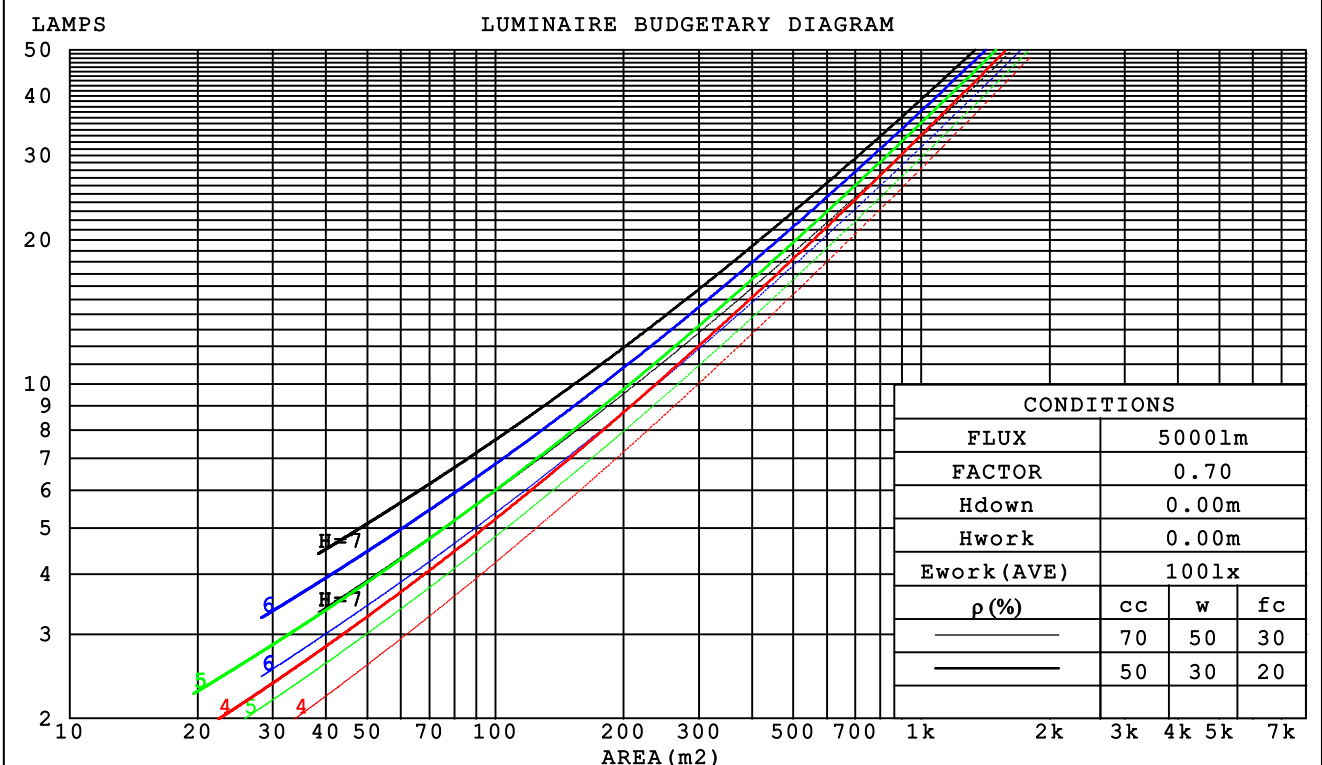
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.02	.98	.94	.00	.96	.92	.95	.92	.88	.91	.88	.85	.87	.84	.82	.80
2.0	.89	.81	.75	.86	.80	.74	.82	.77	.72	.79	.74	.70	.75	.72	.68	.66
3.0	.77	.69	.62	.76	.68	.61	.72	.65	.60	.69	.63	.59	.66	.61	.57	.55
4.0	.68	.59	.52	.67	.58	.52	.64	.57	.51	.61	.55	.50	.59	.53	.49	.47
5.0	.61	.52	.45	.60	.51	.44	.57	.49	.44	.55	.48	.43	.53	.47	.42	.40
6.0	.55	.45	.39	.54	.45	.39	.51	.44	.38	.50	.43	.37	.48	.42	.37	.35
7.0	.49	.40	.34	.48	.40	.34	.47	.39	.34	.45	.38	.33	.43	.37	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.41	.34	.30	.40	.34	.29	.27
9.0	.41	.33	.27	.41	.33	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.24
10.0	.38	.30	.25	.37	.30	.25	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

WEC AND CCEC

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	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	.330	.188	.059	.322	.184	.058	.308	.177	.056	.294	.170	.054	.282	.163	.053	
2.0	.305	.167	.051	.298	.164	.051	.285	.158	.049	.273	.153	.048	.262	.148	.047	
3.0	.279	.149	.045	.273	.146	.044	.261	.142	.043	.251	.137	.042	.241	.133	.041	
4.0	.256	.133	.039	.251	.131	.039	.240	.127	.038	.231	.124	.037	.222	.120	.037	
5.0	.236	.120	.035	.231	.118	.034	.221	.115	.034	.213	.112	.033	.205	.109	.033	
6.0	.218	.109	.031	.213	.108	.031	.205	.105	.031	.197	.103	.030	.190	.100	.030	
7.0	.202	.100	.028	.198	.099	.028	.191	.096	.028	.184	.094	.027	.177	.092	.027	
8.0	.188	.092	.026	.185	.091	.026	.178	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.176	.085	.024	.173	.084	.024	.167	.083	.023	.161	.081	.023	.156	.079	.023	
10.0	.165	.079	.022	.163	.079	.022	.157	.077	.022	.152	.075	.021	.147	.074	.021	

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	.209	.209	.209	.178	.178	.178	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.200	.174	.151	.171	.150	.130	.117	.103	.090	.067	.060	.052	.022	.019	.017	
2.0	.192	.150	.115	.165	.129	.099	.113	.090	.069	.065	.052	.041	.021	.017	.013	
3.0	.185	.133	.092	.158	.115	.079	.109	.080	.056	.063	.047	.033	.020	.015	.011	
4.0	.177	.120	.076	.152	.103	.066	.105	.072	.046	.060	.042	.027	.019	.014	.009	
5.0	.170	.109	.065	.146	.095	.057	.100	.066	.040	.058	.039	.024	.019	.013	.008	
6.0	.162	.101	.057	.140	.088	.050	.096	.061	.035	.056	.036	.021	.018	.012	.007	
7.0	.155	.094	.052	.134	.082	.045	.092	.057	.032	.054	.034	.019	.017	.011	.006	
8.0	.149	.089	.047	.128	.077	.041	.089	.054	.029	.052	.032	.017	.017	.010	.006	
9.0	.143	.084	.044	.123	.073	.038	.085	.051	.027	.050	.030	.016	.016	.010	.005	
10.0	.137	.079	.041	.118	.069	.036	.082	.049	.025	.048	.029	.015	.015	.009	.005	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

UGR(Unified Glare Rating) Table

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm										
NAME: TF5RGBWW-300-IP66					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	31.0	32.5	31.3	32.8	33.0	31.1	32.6	31.4	32.9	33.1
3H	32.6	34.0	32.9	34.3	34.6	32.8	34.2	33.1	34.5	34.8
4H	33.2	34.6	33.6	34.9	35.2	33.5	34.8	33.8	35.1	35.4
6H	33.7	34.9	34.0	35.2	35.6	34.1	35.3	34.4	35.6	36.0
8H	33.8	35.0	34.2	35.3	35.7	34.3	35.5	34.7	35.8	36.2
12H	33.8	35.0	34.2	35.4	35.7	34.5	35.7	34.9	36.0	36.4
4H 2H	31.7	33.0	32.0	33.3	33.6	31.7	33.1	32.1	33.4	33.7
3H	33.4	34.6	33.8	34.9	35.3	33.6	34.8	34.0	35.1	35.5
4H	34.2	35.3	34.6	35.6	36.0	34.4	35.5	34.8	35.9	36.3
6H	34.7	35.7	35.2	36.1	36.5	35.1	36.1	35.6	36.5	36.9
8H	34.9	35.8	35.4	36.2	36.7	35.4	36.3	35.9	36.7	37.2
12H	35.0	35.9	35.5	36.3	36.7	35.7	36.5	36.1	36.9	37.4
8H 4H	34.5	35.4	34.9	35.8	36.2	34.7	35.6	35.2	36.0	36.4
6H	35.2	36.0	35.7	36.4	36.9	35.6	36.3	36.0	36.8	37.2
8H	35.5	36.1	36.0	36.6	37.1	36.0	36.6	36.5	37.1	37.6
12H	35.7	36.2	36.2	36.7	37.3	36.3	36.9	36.9	37.4	37.9
12H 4H	34.5	35.3	35.0	35.8	36.2	34.7	35.5	35.2	36.0	36.4
6H	35.3	36.0	35.8	36.4	36.9	35.6	36.3	36.1	36.8	37.3
8H	35.6	36.2	36.1	36.7	37.2	36.1	36.6	36.6	37.1	37.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 379.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.4)

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

UTILIZATION FACTORS TABLE

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

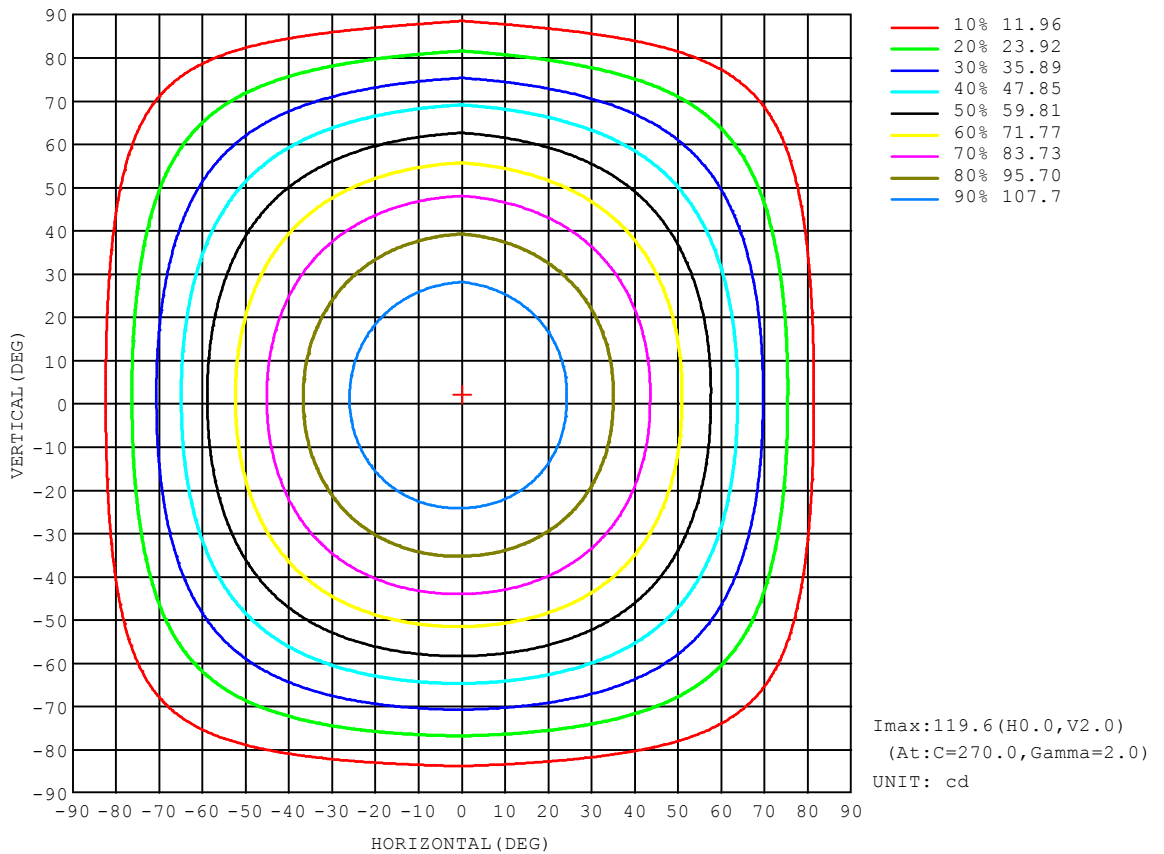
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	55	43	36	54	43	36	53	43	36	29
0.80	65	53	46	64	53	45	62	52	45	38
1.00	74	62	54	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	81	72	66	58
2.00	93	84	77	91	82	76	87	80	74	66
2.50	97	89	82	95	87	81	90	84	79	70
3.00	100	93	87	98	91	86	93	88	83	74
4.00	105	98	93	102	96	92	97	93	89	79
5.00	107	102	97	104	100	96	99	96	92	82
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:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

ISOCANDELA DIAGRAM

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



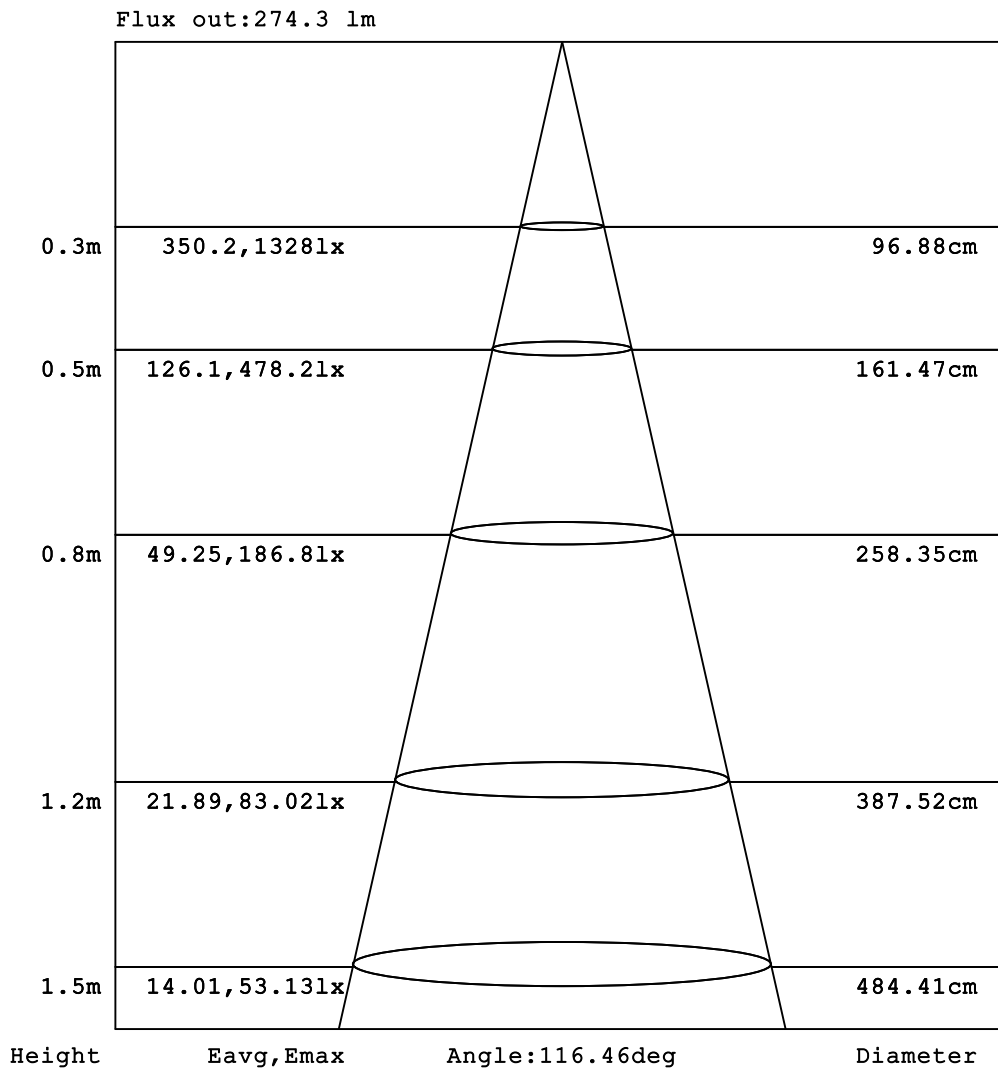
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: CHM  
 Test Date: 2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 9.727m [K=1.0000]  
 Remarks: W 2400-2600K



AAI Figure

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



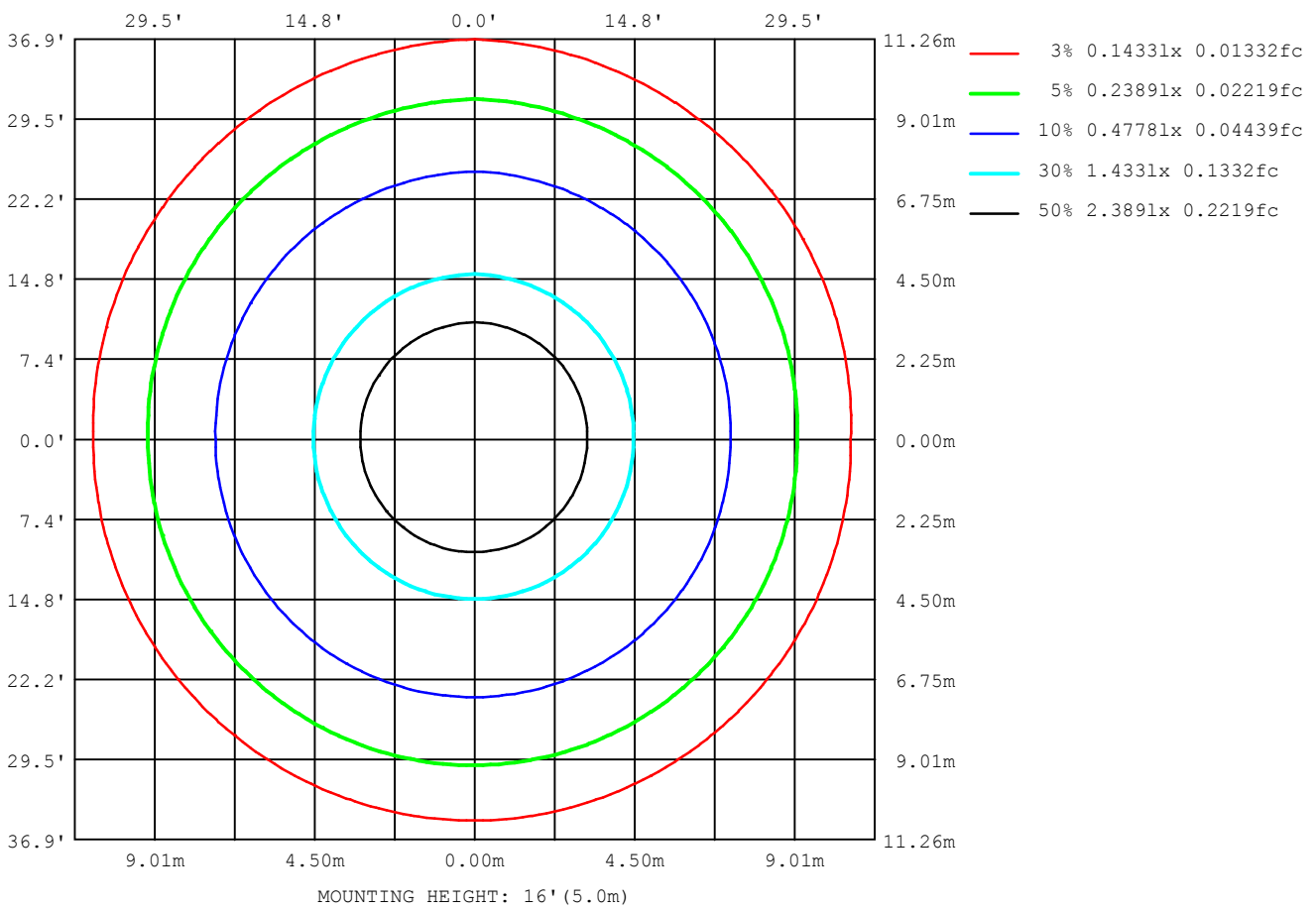
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

ISOLUX DIAGRAM

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: CHM  
 Test Date: 2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 9.727m [K=1.0000]  
 Remarks: W 2400-2600K

LED Avg.L Report

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

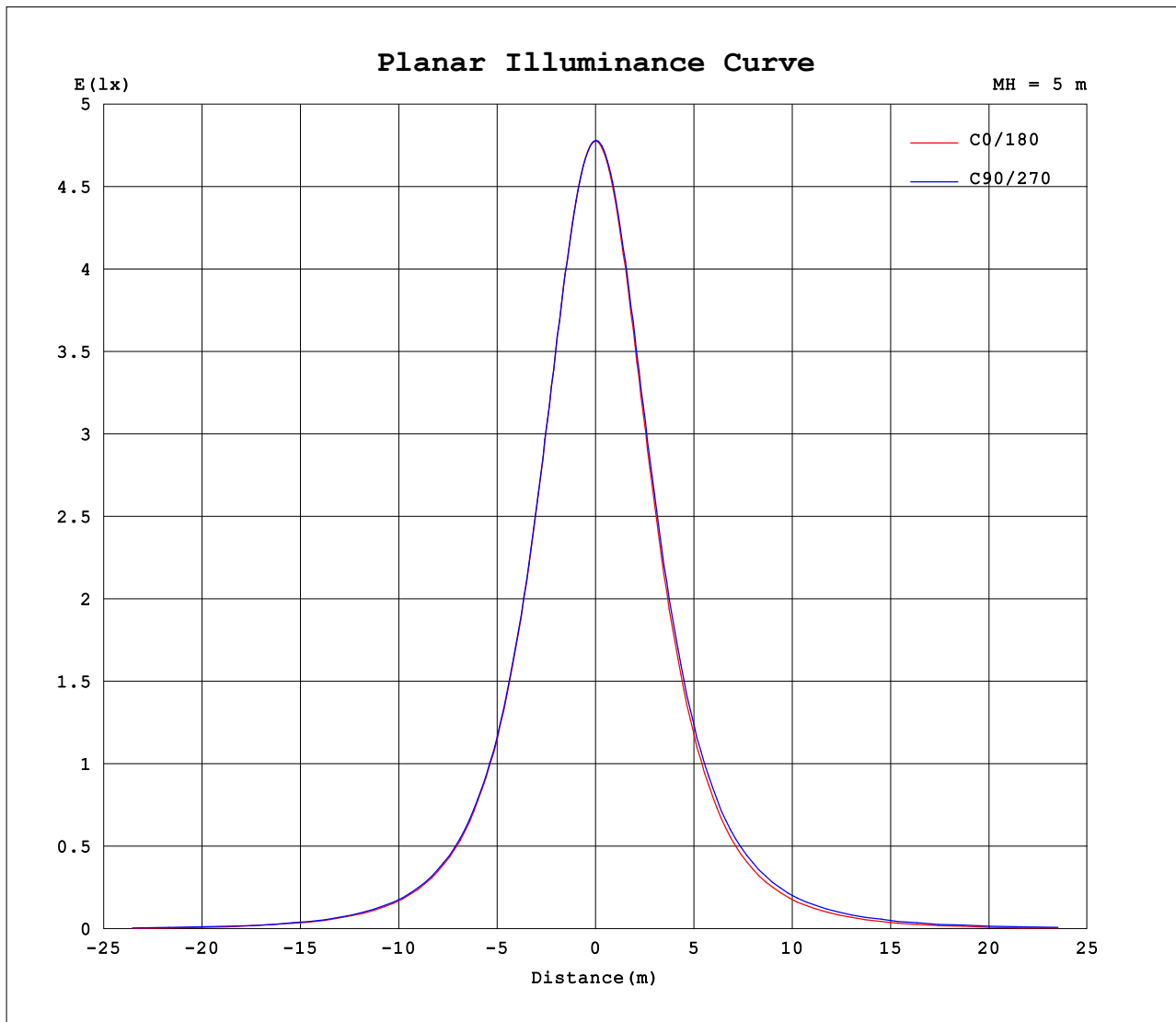
AvgL	cd/m2
L_0~180 (65) av	73228
L_0~180 (75) av	65958
L_0~180 (85) av	51758
L_90~270 (65) av	80989
L_90~270 (75) av	82317
L_90~270 (85) av	106814
L_45 (65) av	78191
L_45 (75) av	76343
L_45 (85) av	86556

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: CHM  
 Test Date: 2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 9.727m [K=1.0000]  
 Remarks: W 2400-2600K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.003V I:0.2020A P:4.8486W PF:1.0000 Freq:49.99Hz Lamp Flux:379.452x1 lm		
NAME: TF5RGBWW-300-IP66	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270															
0	119	120	119	120															
5	119	119	119	119															
10	117	117	118	118															
15	115	115	116	117															
20	111	111	113	114															
25	107	107	109	110															
30	102	102	104	106															
35	95.6	96.1	97.8	101															
40	88.9	89.6	91.3	94.7															
45	81.4	82.4	83.9	88.0															
50	73.2	74.4	75.8	80.7															
55	64.5	66.0	67.0	72.8															
60	55.2	56.9	57.6	64.3															
65	45.3	47.4	47.6	55.3															
70	35.1	37.5	37.2	45.9															
75	24.6	27.6	26.6	36.3															
80	14.5	18.2	16.3	26.7															
85	5.96	10.4	7.58	17.5															
90	0.70	5.50	0.98	9.75															
95	0.47	3.61	0.28	4.78															
100	0.56	2.44	0.35	2.29															
105	0.66	2.30	0.43	2.14															
110	0.66	1.91	0.50	2.13															
115	0.69	1.56	0.59	1.99															
120	0.75	1.15	0.66	1.88															
125	0.81	0.83	0.74	1.87															
130	0.87	0.88	0.81	2.04															
135	0.94	0.94	0.89	2.37															
140	1.00	1.00	0.95	2.35															
145	1.05	1.05	1.01	2.04															
150	1.11	1.10	1.06	1.68															
155	1.16	1.15	1.11	1.46															
160	1.20	1.18	1.15	1.35															
165	1.23	1.23	1.20	1.29															
170	1.25	1.25	1.24	1.24															
175	1.28	1.27	1.27	1.26															
180	1.28	1.28	1.28	1.29															

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CHM  
 Test Date:2022-05-08

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:9.727m [K=1.0000]  
 Remarks: W 2400-2600K