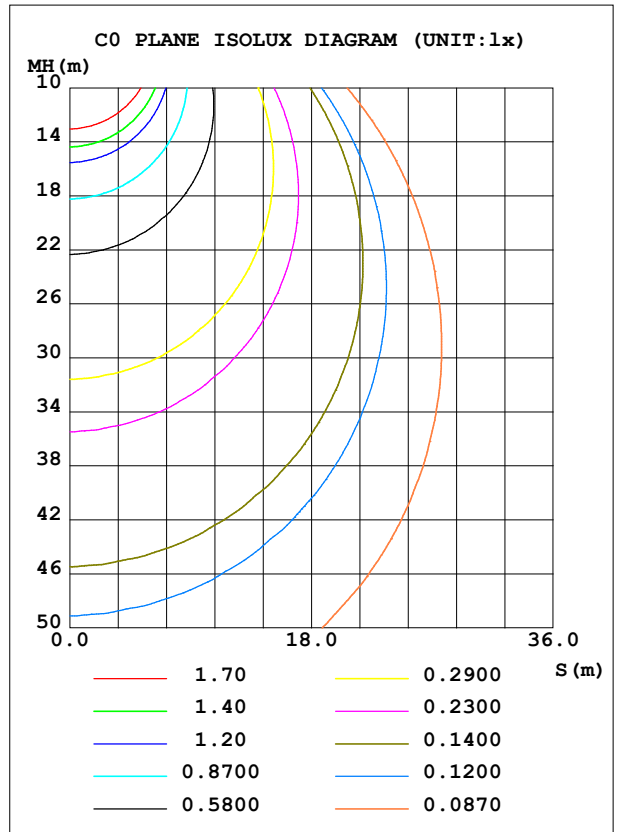
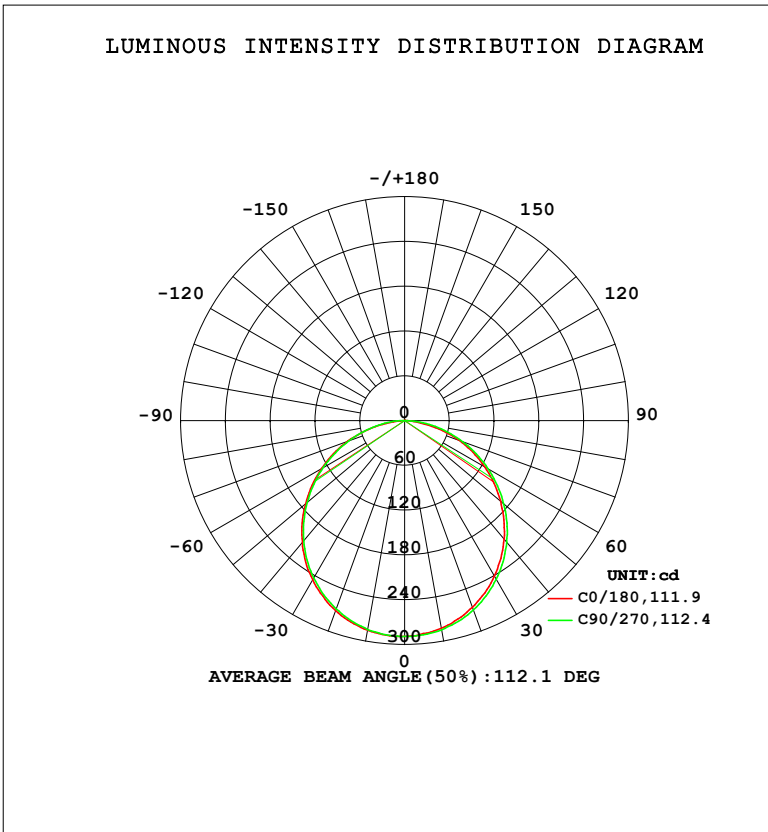


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	DL-FR-5CCT-4-WH	Imax (cd)	289.6	S/MH (C0/180)	1.27
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	823.85	$\eta$ UP, DN (C0-180)	0.0, 50.3
NOMINAL FLUX (lm)	823.85	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 49.7
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	$\eta$ down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-01-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	282.6	283.5	284.8	285.2	285.2	284.4	284.2	282.9	0- 10	27.36	27.36	3.32,3.32
20	266.2	268.0	269.7	270.5	270.8	269.2	268.5	267.1	10- 20	78.36	105.7	12.8,12.8
30	240.8	243.2	245.6	246.8	246.1	244.8	243.5	242.2	20- 30	118.7	224.4	27.2,27.2
40	207.5	210.6	212.8	213.8	213.1	211.6	210.2	208.5	30- 40	143.0	367.4	44.6,44.6
50	167.9	171.4	173.4	173.7	173.4	171.1	170.3	168.7	40- 50	148.0	515.4	62.6,62.6
60	124.0	127.4	129.1	129.1	128.3	126.5	125.8	124.3	50- 60	133.6	648.9	78.8,78.8
70	77.65	81.57	82.95	82.60	81.29	79.95	79.40	78.22	60- 70	102.7	751.6	91.2,91.2
80	27.40	32.88	37.72	34.28	30.37	31.59	35.09	30.62	70- 80	59.58	811.2	98.5,98.5
90	0.3452	0.3706	0.4036	0.3692	0.2192	0.2344	0.2704	0.2425	80- 90	12.68	823.8	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		

Conical surface Flux(90deg): 442 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(130deg): 704.95 lm

%lum = 85.6%

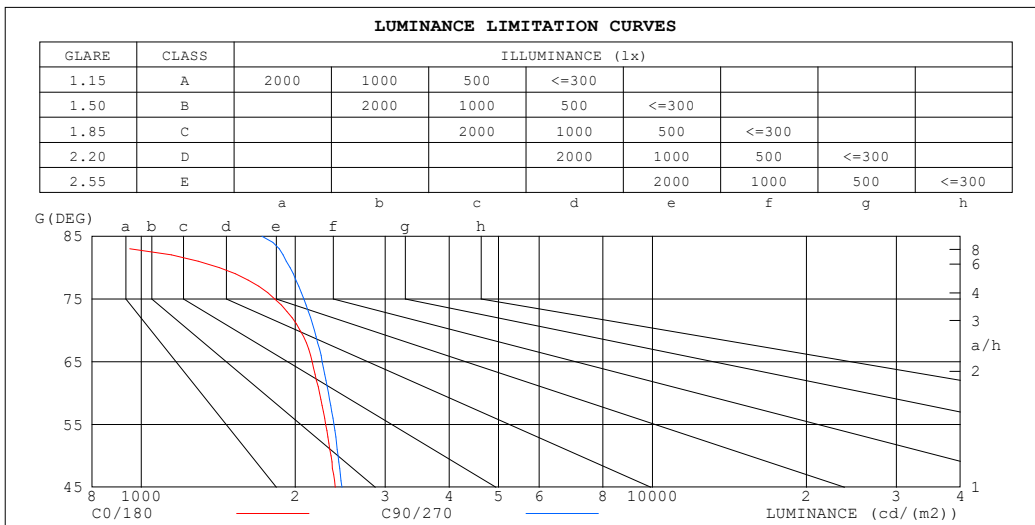
%lamp = 85.6%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-01-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

<b>Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz</b> <b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm</b>		
<b>NAME: DL-FR-5CCT-4-WH</b>	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>SPEC.: 3500K 90</b>	<b>DIM.:</b>	<b>SERIAL No.:</b>
<b>MFR.: MAGICLITE</b>	<b>SUR.:</b>	<b>Shielding Angle:</b>



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	387	1721
80	1421	1954
75	1825	2079
70	2044	2182
65	2159	2259
60	2232	2323
55	2295	2381
50	2352	2427
45	2397	2468

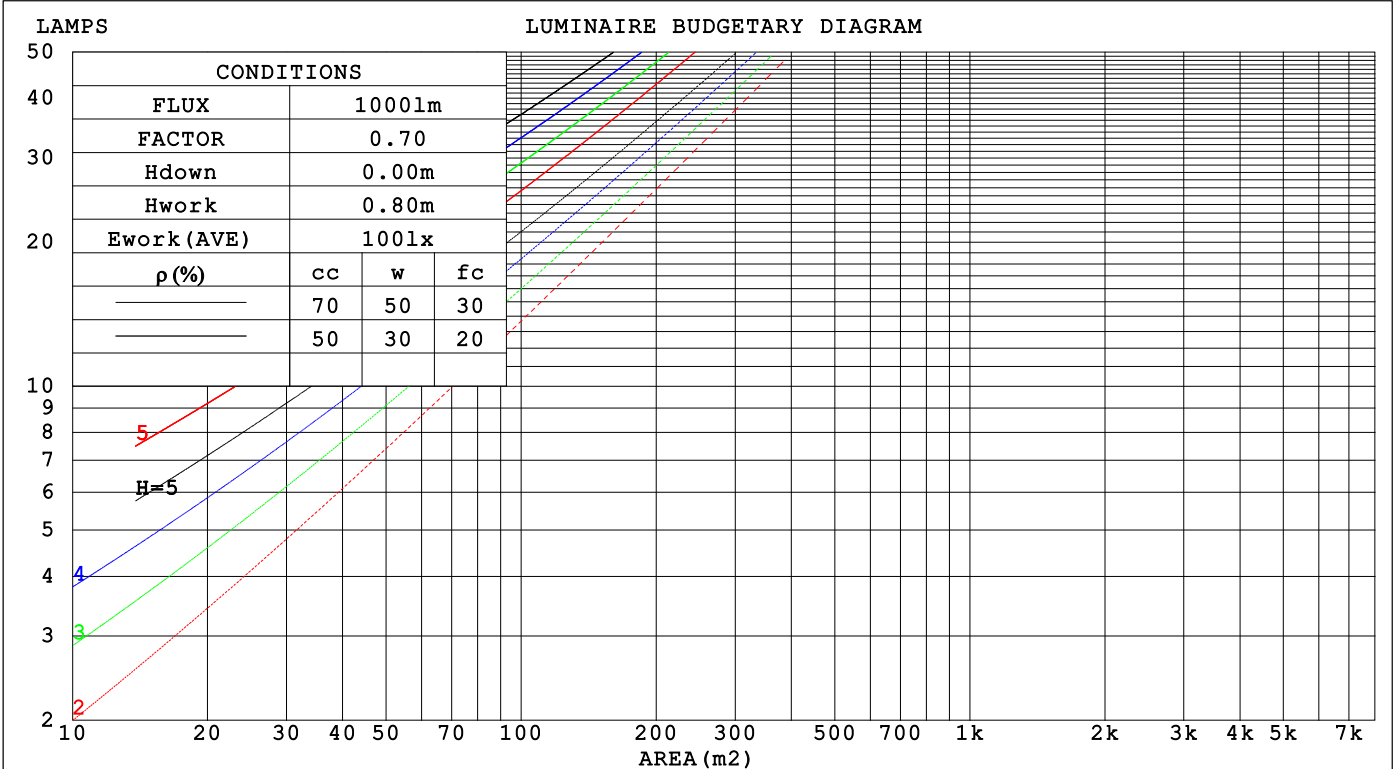
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3°C  
 Operators:  
 Test Date: 2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	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	1.19	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	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.94	.91	.88	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.70
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.61	.58
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.59	.52	.46	.57	.51	.46	.56	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.35	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.308	.175	.055	.301	.171	.054	.287	.165	.053	.275	.159	.051	.264	.153	.049	
2.0	.291	.160	.049	.285	.157	.048	.273	.152	.047	.262	.147	.046	.252	.143	.045	
3.0	.270	.144	.043	.264	.142	.043	.254	.138	.042	.244	.134	.041	.236	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.109	.033	
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.024	.171	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.078	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.074	.141	.099	.064	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.117	.065	.029	.080	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-01-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	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	16.5	18.0	16.7	18.2	18.4	16.6	18.1	16.9	18.4	18.6
3H	18.0	19.4	18.3	19.6	19.9	18.2	19.6	18.5	19.9	20.1
4H	18.6	19.9	18.9	20.2	20.4	18.9	20.2	19.2	20.5	20.7
6H	18.9	20.2	19.2	20.4	20.7	19.4	20.7	19.7	20.9	21.2
8H	19.0	20.2	19.3	20.5	20.8	19.6	20.8	19.9	21.1	21.4
12H	18.9	20.1	19.3	20.4	20.7	19.7	20.8	20.0	21.1	21.4
4H 2H	17.1	18.4	17.4	18.7	19.0	17.2	18.6	17.6	18.8	19.1
3H	18.8	20.0	19.2	20.3	20.6	19.0	20.2	19.4	20.5	20.8
4H	19.5	20.6	19.9	20.9	21.3	19.8	20.9	20.2	21.2	21.6
6H	20.0	20.9	20.4	21.3	21.6	20.5	21.4	20.9	21.8	22.1
8H	20.1	21.0	20.5	21.3	21.7	20.7	21.6	21.1	21.9	22.3
12H	20.1	20.9	20.5	21.3	21.7	20.8	21.7	21.3	22.0	22.5
8H 4H	19.8	20.7	20.2	21.1	21.5	20.1	21.0	20.5	21.3	21.7
6H	20.4	21.1	20.8	21.5	22.0	20.9	21.6	21.3	22.0	22.4
8H	20.5	21.2	21.0	21.6	22.1	21.2	21.8	21.7	22.3	22.7
12H	20.6	21.1	21.0	21.6	22.1	21.4	22.0	21.9	22.4	22.9
12H 4H	19.8	20.7	20.3	21.0	21.4	20.1	20.9	20.5	21.3	21.7
6H	20.5	21.1	20.9	21.5	22.0	20.9	21.6	21.4	22.0	22.4
8H	20.6	21.2	21.1	21.6	22.1	21.3	21.8	21.7	22.3	22.7

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.2 / - 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, 823.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.7)  
 Area: 0.111111 m2

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Temperature:24.3°C	Humidity:65.0%
Operators:	Test Distance:3.080m [K=1.0000]
Test Date:2024-01-24	Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:

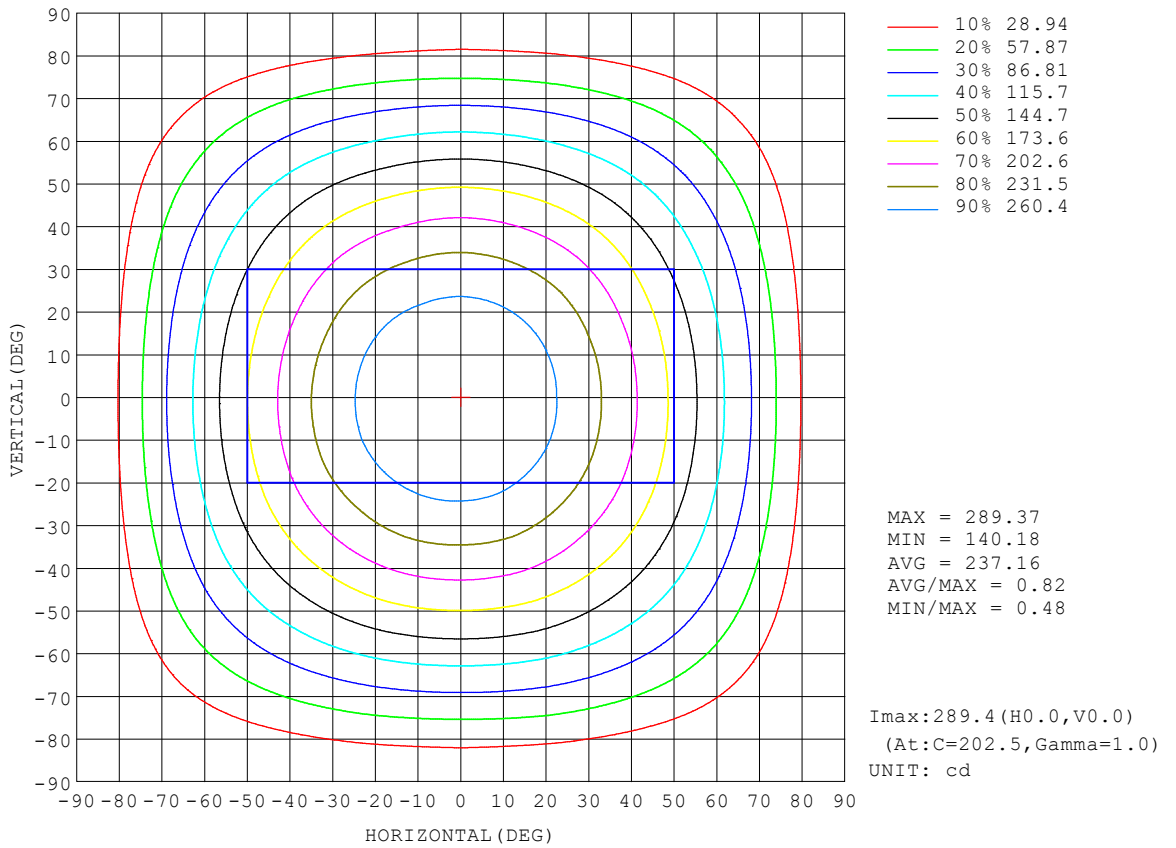
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	55	48	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-01-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:

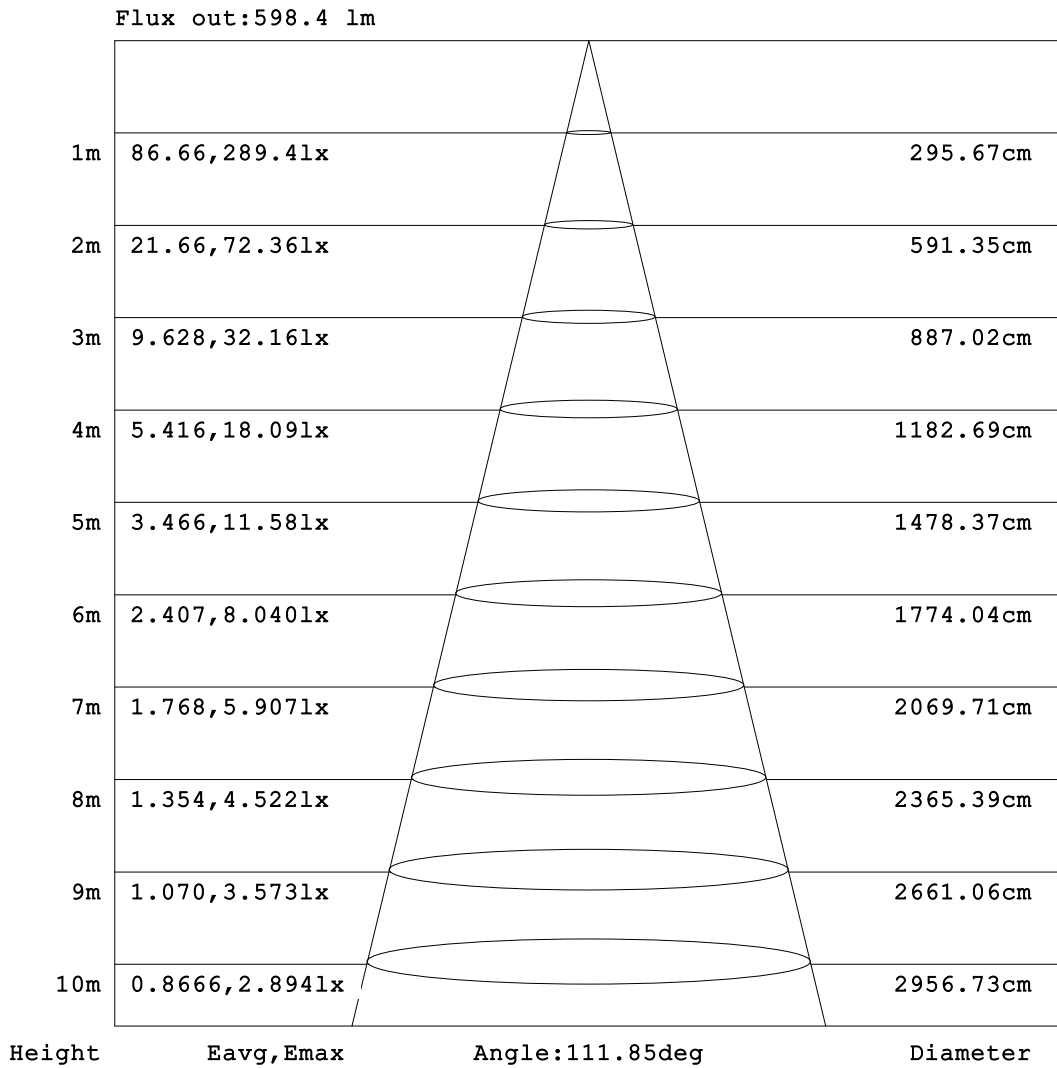


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:



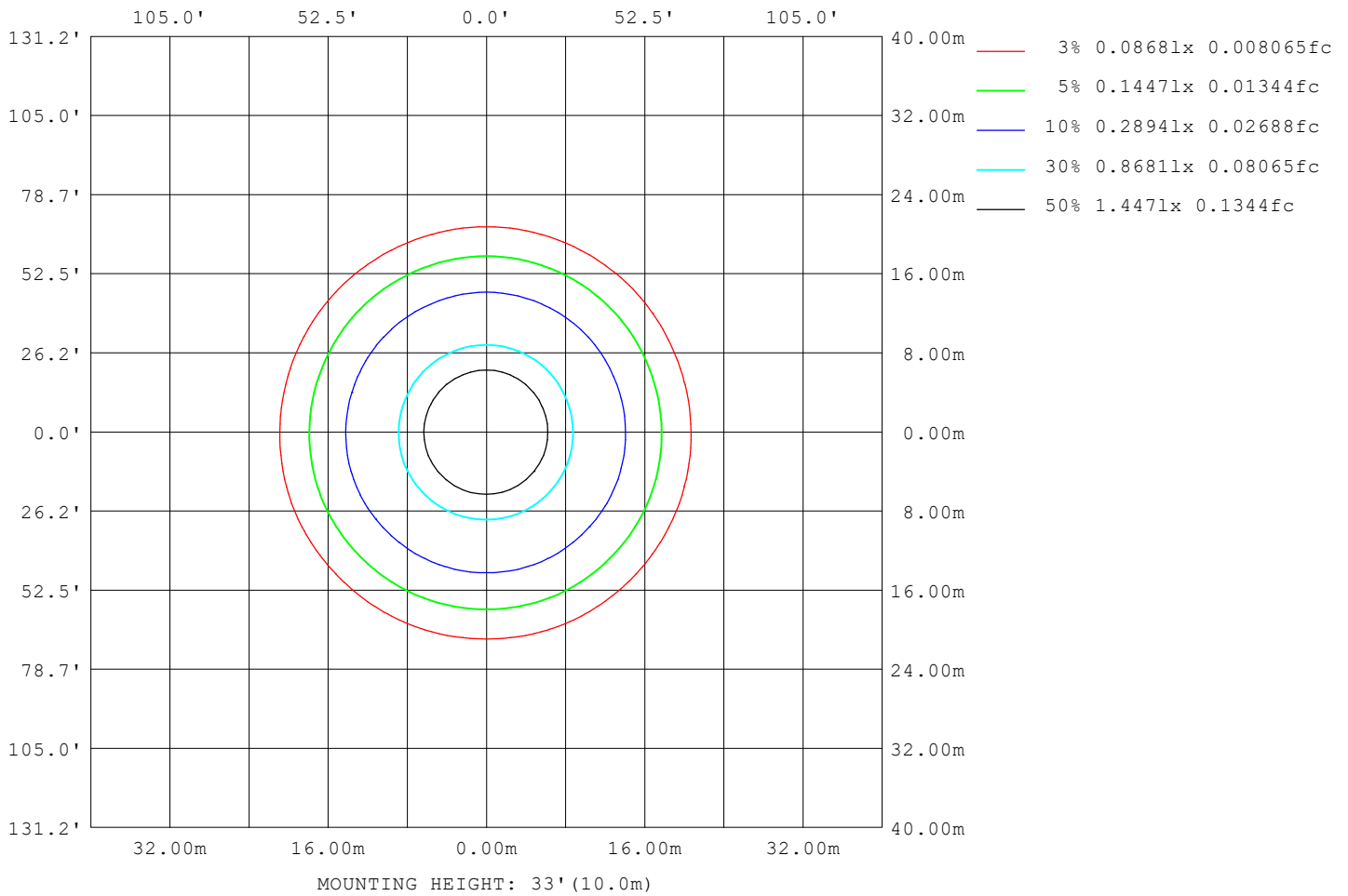
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3°C  
 Operators:  
 Test Date: 2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:119.72V I:0.0918A P:10.765W PF:0.9796 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:823.85x1 lm		
NAME: DL-FR-5CCT-4-WH	TYPE:	WEIGHT:
SPEC.: 3500K 90	DIM.:	SERIAL No.:
MFR.: MAGICLITE	SUR.:	Shielding Angle:

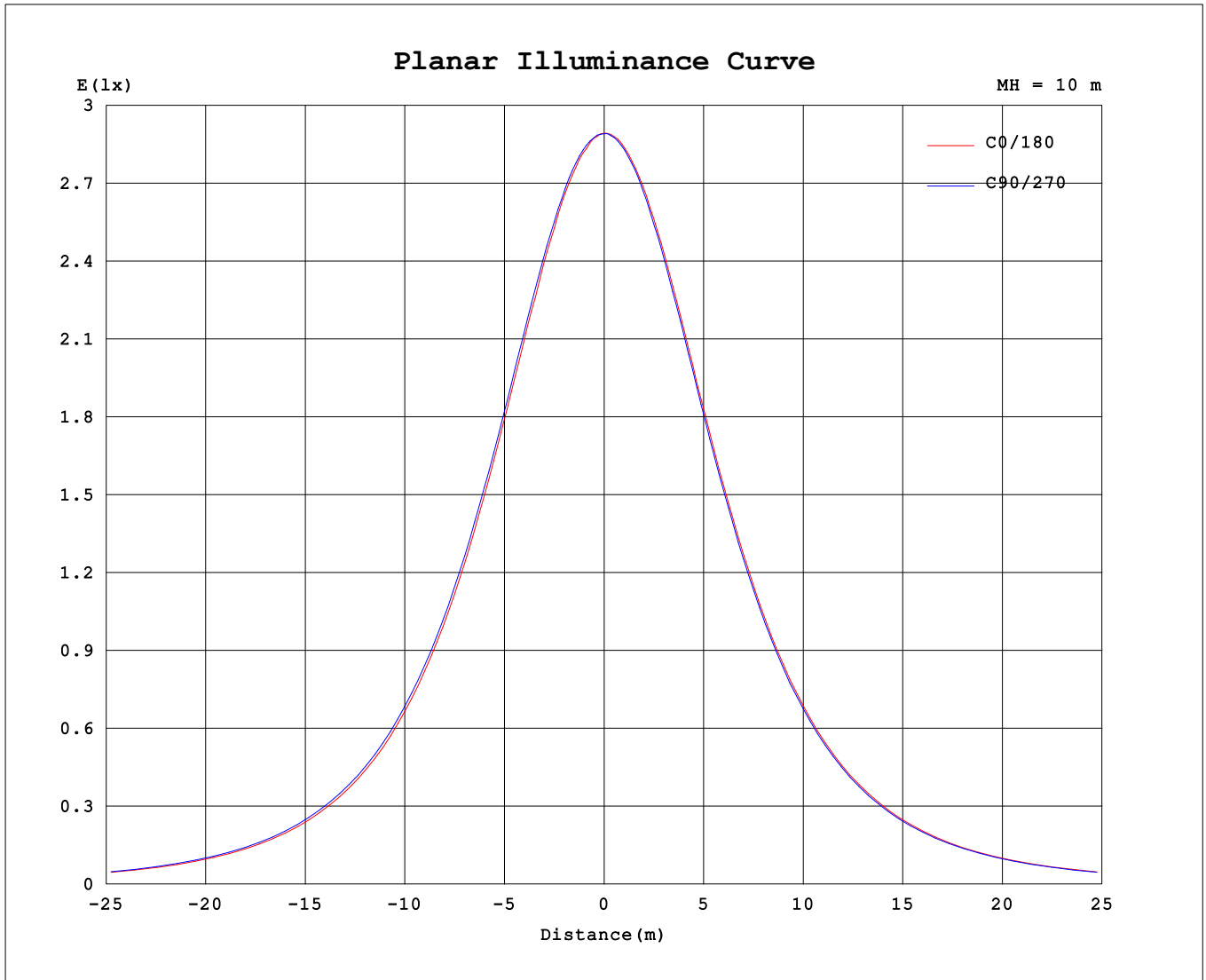
AvgL	cd/m2
L_0~180 (65) av	2198
L_0~180 (75) av	1882
L_0~180 (85) av	491
L_90~270 (65) av	2222
L_90~270 (75) av	2024
L_90~270 (85) av	1618
L_45 (65) av	2209
L_45 (75) av	1971
L_45 (85) av	857

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-01-24

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

