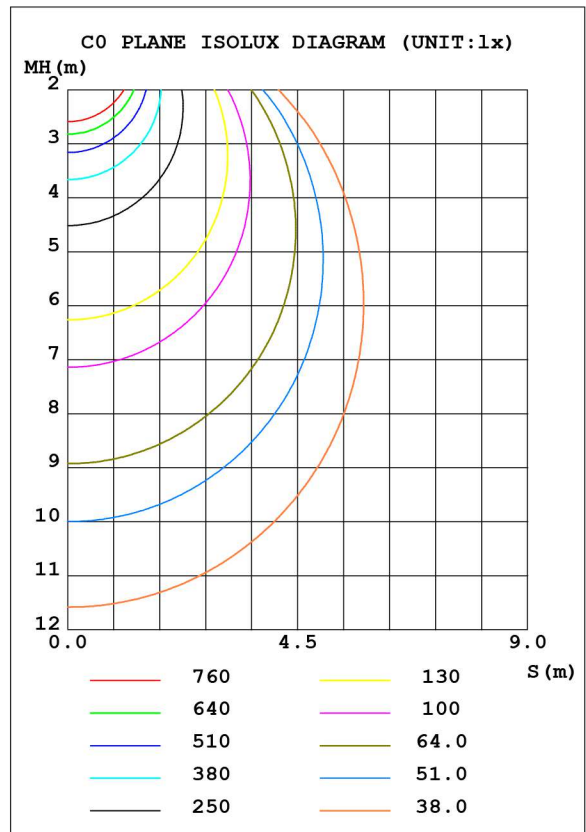
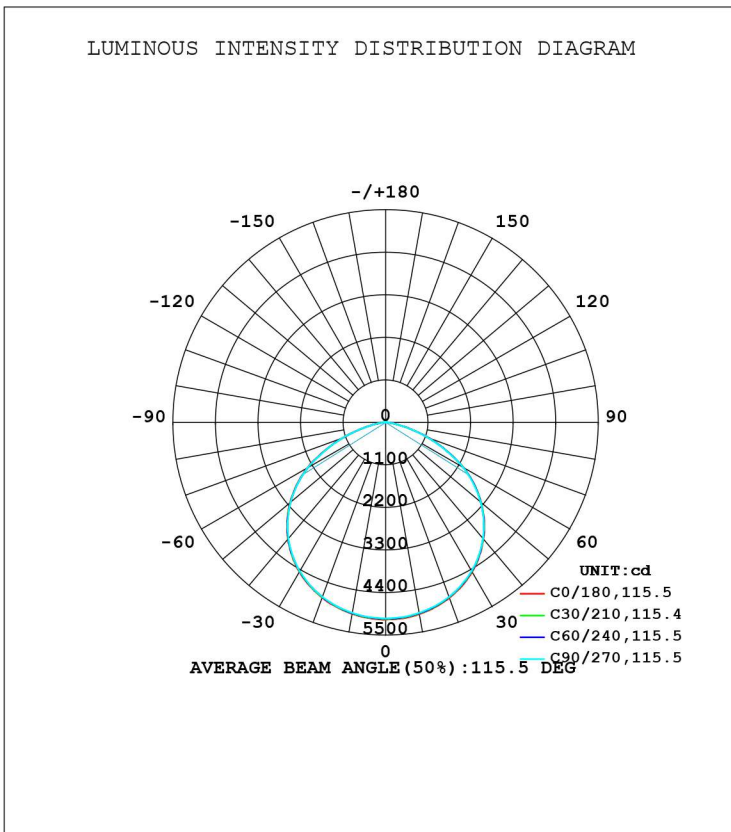


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME: FDUFO-DS-150W-5K-120M-D	TYPE:	
MFR.: Factory Direct Lighting		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 149.44 lm/W			
MODEL	HD-HB05M-100W-XX-150A	I _{max} (cd)	5096	S/MH (C0/180)	1.30
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.30
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	14648	η UP, DN (C0-180)	0.7,49.3
NOMINAL FLUX (lm)	14648.4	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.7,49.2
LAMPS INSIDE	1	η up (%)	1.5	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	98.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: C
 Test Date: 10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.000m [K=1.0125]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

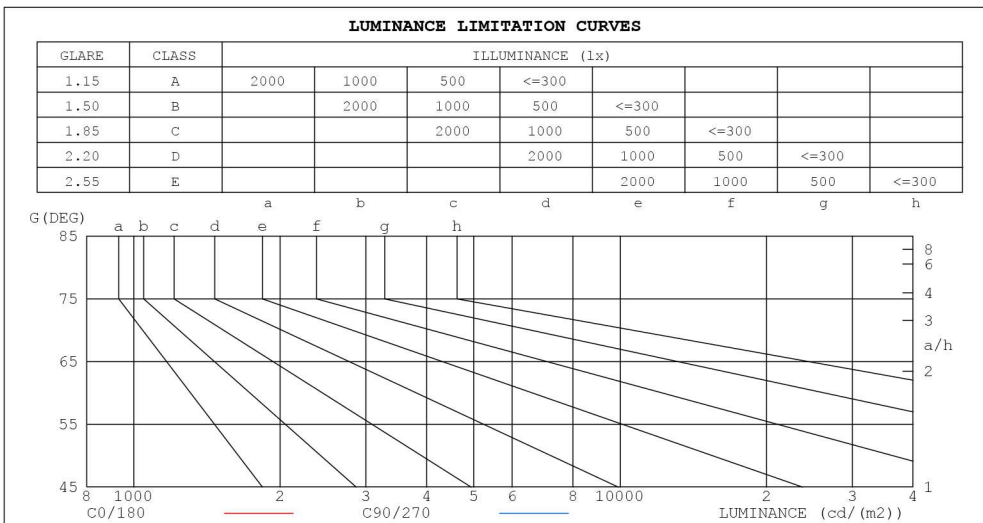
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5034	5015	5000	4990	5026	5008	5000	4998	0- 10	480.9	480.9	3.28,3.28
20	4826	4808	4797	4786	4818	4801	4799	4790	10- 20	1390	1871	12.8,12.8
30	4468	4454	4440	4431	4465	4444	4443	4432	20- 30	2140	4010	27.4,27.4
40	3935	3931	3917	3913	3938	3916	3914	3903	30- 40	2629	6640	45.3,45.3
50	3221	3227	3208	3212	3231	3207	3211	3198	40- 50	2766	9405	64.2,64.2
60	2322	2335	2308	2322	2337	2304	2314	2298	50- 60	2487	11892	81.2,81.2
70	1208	1208	1185	1199	1209	1186	1197	1184	60- 70	1723	13615	92.9,92.9
80	262.0	275.5	261.8	272.9	280.9	259.6	273.6	260.3	70- 80	728.8	14343	97.9,97.9
90	6.240	6.117	6.176	6.152	4.475	4.364	4.378	4.320	80- 90	91.26	14435	98.5,98.5
100	13.70	13.43	13.58	13.49	11.10	11.26	11.10	11.24	90-100	9.197	14444	98.6,98.6
110	24.33	23.94	24.13	24.04	21.32	21.68	21.50	21.68	100-110	18.40	14462	98.7,98.7
120	35.21	34.79	34.94	34.85	32.59	32.34	32.55	32.74	110-120	28.04	14490	98.9,98.9
130	44.25	43.84	43.97	43.91	42.77	42.74	41.97	42.15	120-130	34.59	14525	99.2,99.2
140	51.68	51.30	51.42	51.45	51.27	51.17	50.95	50.91	130-140	36.58	14561	99.4,99.4
150	57.64	57.23	57.45	57.43	58.18	58.15	57.94	58.05	140-150	34.20	14596	99.6,99.6
160	62.92	62.62	62.73	62.75	62.04	61.81	61.77	61.78	150-160	27.96	14624	99.8,99.8
170	71.65	72.17	73.28	73.31	64.01	64.39	64.42	64.45	160-170	18.23	14642	100,100
180	67.13	68.17	69.24	69.26	67.16	68.10	69.22	69.21	170-180	6.587	14648	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	35071	35718
80	85731	85661
75	146333	145853
70	200736	196881
65	233153	232071
60	263902	262321
55	277098	275721
50	284746	283537
45	289544	288428

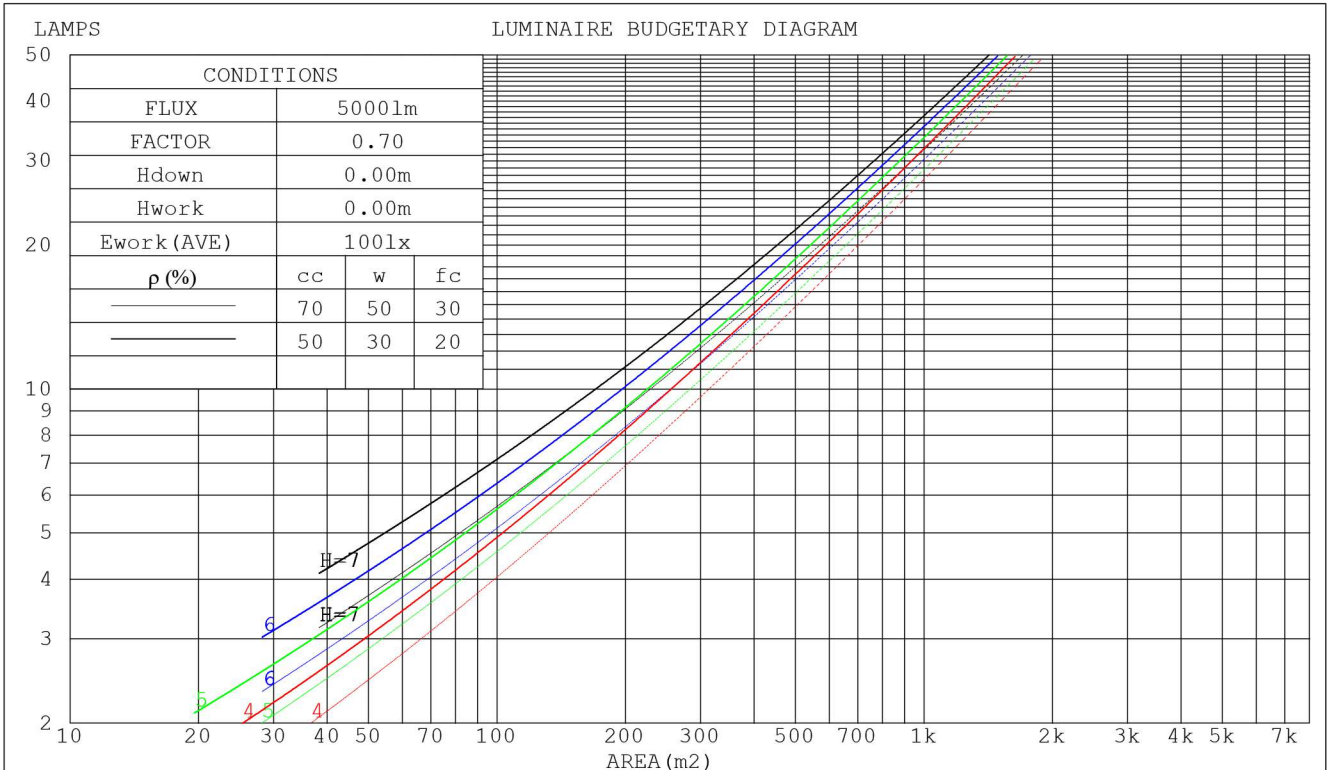
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: C
 Test Date: 10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.000m [K=1.0125]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	

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	.99
1.0	1.05	1.01	.97	1.02	.99	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.82	.78	.75	.79	.76	.73	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.69	.64	.73	.67	.63	.70	.66	.62	.60
4.0	.71	.63	.56	.70	.62	.56	.67	.60	.55	.65	.59	.54	.62	.57	.53	.51
5.0	.64	.55	.48	.63	.54	.48	.60	.53	.47	.58	.52	.47	.56	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.54	.47	.41	.53	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.37	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.47	.38	.33	.45	.38	.33	.44	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.30	.43	.35	.30	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

WEC AND CCEC

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	

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	.287	.163	.052	.279	.159	.051	.265	.152	.049	.253	.146	.047	.241	.140	.045	
2.0	.277	.152	.047	.270	.149	.046	.258	.144	.045	.247	.138	.043	.236	.134	.042	
3.0	.260	.138	.041	.254	.136	.041	.243	.132	.040	.233	.128	.039	.224	.124	.038	
4.0	.242	.126	.037	.237	.124	.037	.227	.120	.036	.218	.117	.035	.210	.114	.035	
5.0	.225	.115	.033	.221	.113	.033	.212	.110	.032	.204	.108	.032	.196	.105	.032	
6.0	.210	.105	.030	.206	.104	.030	.198	.101	.030	.191	.099	.029	.184	.097	.029	
7.0	.196	.097	.027	.192	.096	.027	.185	.094	.027	.179	.092	.027	.173	.090	.026	
8.0	.183	.090	.025	.180	.089	.025	.174	.087	.025	.168	.085	.025	.162	.083	.024	
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.158	.079	.023	.153	.078	.022	
10.0	.162	.078	.022	.159	.077	.021	.154	.076	.021	.149	.074	.021	.145	.073	.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	.202	.202	.202	.172	.172	.172	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.190	.168	.147	.163	.144	.127	.111	.099	.088	.064	.057	.051	.020	.018	.016	
2.0	.182	.143	.111	.156	.123	.096	.107	.085	.067	.061	.050	.039	.020	.016	.013	
3.0	.174	.126	.087	.149	.108	.075	.102	.075	.053	.059	.044	.031	.019	.014	.010	
4.0	.167	.112	.071	.143	.097	.061	.098	.068	.043	.057	.040	.026	.018	.013	.008	
5.0	.159	.102	.059	.137	.088	.052	.094	.062	.036	.055	.036	.022	.018	.012	.007	
6.0	.152	.093	.051	.131	.081	.045	.090	.057	.032	.052	.033	.019	.017	.011	.006	
7.0	.146	.087	.045	.125	.075	.039	.087	.053	.028	.050	.031	.017	.016	.010	.005	
8.0	.140	.081	.041	.120	.070	.035	.083	.049	.025	.048	.029	.015	.016	.010	.005	
9.0	.134	.076	.037	.115	.066	.032	.080	.046	.023	.046	.027	.014	.015	.009	.005	
10.0	.128	.072	.034	.110	.062	.030	.077	.044	.021	.045	.026	.013	.014	.009	.004	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm										
NAME: FDUFO-DS-150W-5K-120M-D					TYPE:					
MFR.: Factory Direct Lighting										
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	23.1	24.6	23.4	24.8	25.1	23.1	24.6	23.4	24.8	25.1
3H	24.3	25.6	24.6	25.9	26.2	24.3	25.6	24.6	25.9	26.1
4H	24.6	25.9	24.9	26.1	26.4	24.6	25.8	24.9	26.1	26.4
6H	24.7	25.9	25.0	26.2	26.5	24.6	25.8	25.0	26.1	26.4
8H	24.6	25.8	25.0	26.1	26.4	24.6	25.8	25.0	26.1	26.4
12H	24.6	25.7	25.0	26.0	26.4	24.6	25.7	24.9	26.0	26.3
4H 2H	23.7	24.9	24.0	25.2	25.5	23.6	24.9	24.0	25.2	25.5
3H	24.9	26.1	25.3	26.4	26.7	24.9	26.0	25.3	26.4	26.7
4H	25.3	26.3	25.7	26.7	27.0	25.3	26.3	25.7	26.6	27.0
6H	25.4	26.3	25.9	26.7	27.1	25.4	26.3	25.8	26.7	27.1
8H	25.4	26.3	25.9	26.7	27.1	25.4	26.2	25.9	26.6	27.1
12H	25.4	26.2	25.9	26.6	27.0	25.4	26.1	25.8	26.6	27.0
8H 4H	25.4	26.2	25.8	26.6	27.0	25.4	26.2	25.8	26.6	27.0
6H	25.6	26.3	26.1	26.7	27.2	25.6	26.3	26.0	26.7	27.1
8H	25.6	26.2	26.1	26.7	27.1	25.6	26.2	26.1	26.6	27.1
12H	25.6	26.1	26.1	26.6	27.1	25.6	26.1	26.1	26.6	27.1
12H 4H	25.4	26.1	25.8	26.5	27.0	25.3	26.1	25.8	26.5	27.0
6H	25.6	26.2	26.1	26.6	27.1	25.6	26.2	26.0	26.6	27.1
8H	25.6	26.1	26.1	26.6	27.1	25.6	26.1	26.1	26.6	27.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.5				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 14648 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.3)
 Area: 0.0176 m2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	

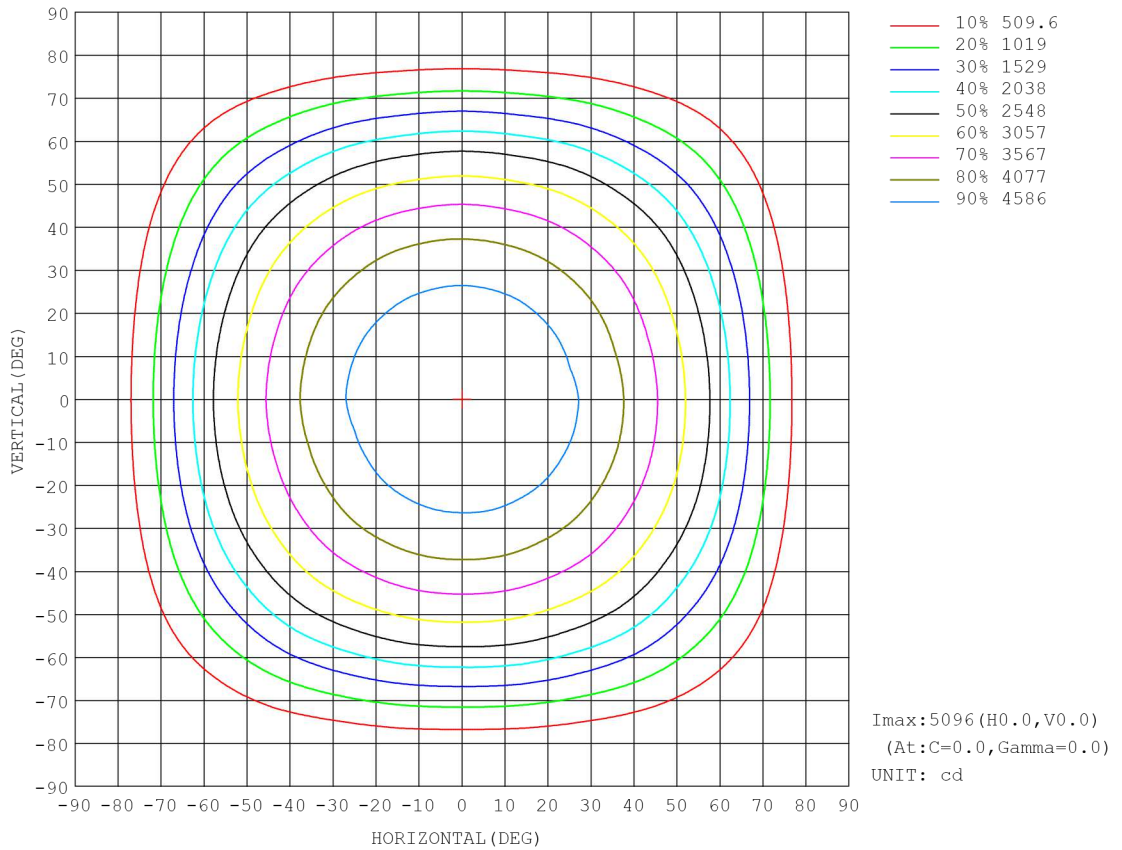
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	49	42
1.00	77	66	59	75	65	58	73	66	58	51
1.25	84	74	67	82	73	66	80	71	65	58
1.50	89	79	73	87	78	72	84	77	71	63
2.00	96	88	81	94	86	81	90	84	79	71
2.50	100	92	86	97	91	85	94	88	83	75
3.00	103	96	91	101	95	90	96	92	88	79
4.00	107	101	97	104	100	96	100	96	93	84
5.00	109	105	101	107	102	99	102	99	96	86
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:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	

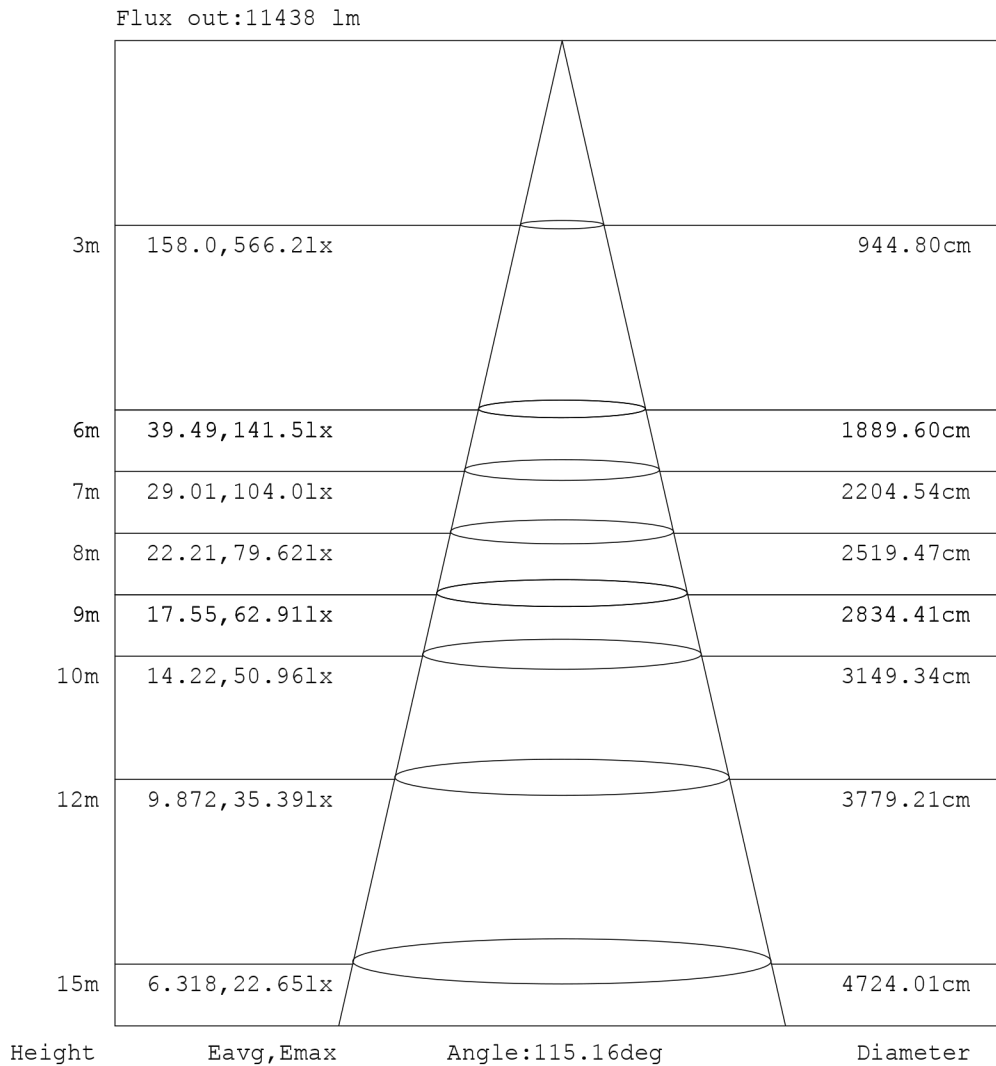


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

AAI Figure

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	



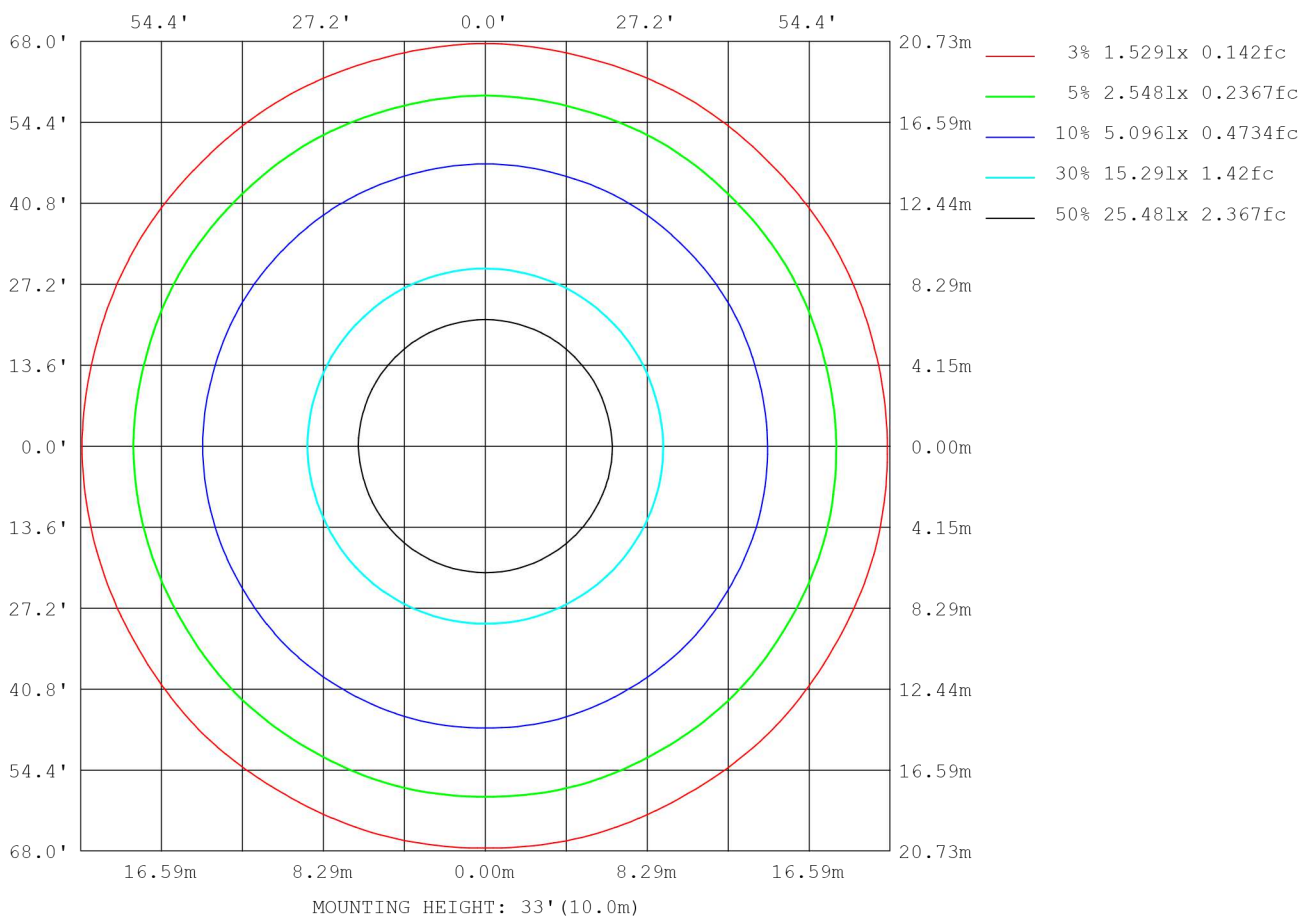
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

ISOLUX DIAGRAM

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME: FDUFO-DS-150W-5K-120M-D	TYPE:	
MFR.: Factory Direct Lighting		



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

LED Avg.L Report

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME: FDUFO-DS-150W-5K-120M-D	TYPE:	
MFR.: Factory Direct Lighting		

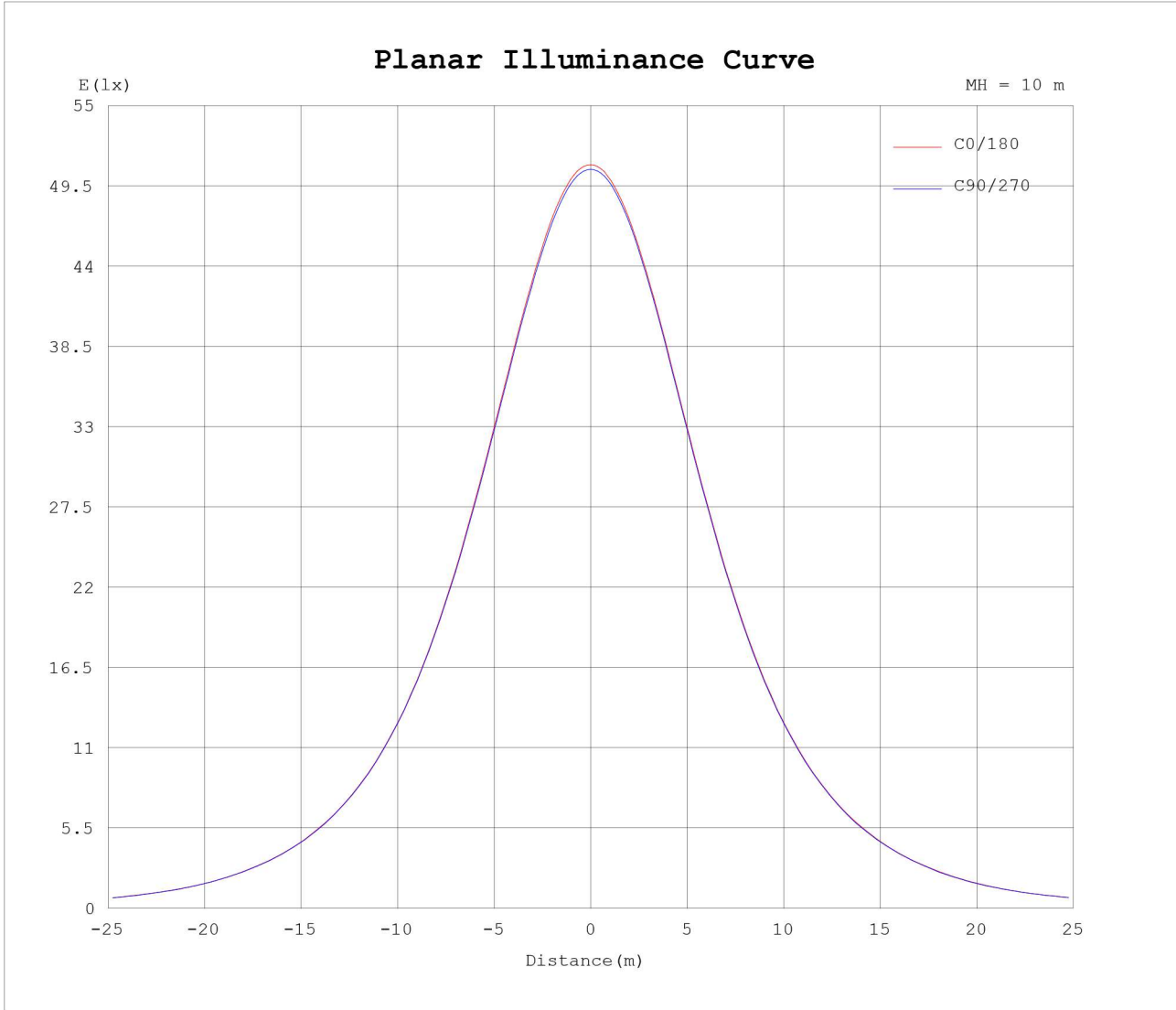
AvgL	cd/m2
L_0~180 (65) av	234461
L_0~180 (75) av	148004
L_0~180 (85) av	36417
L_90~270 (65) av	233082
L_90~270 (75) av	146541
L_90~270 (85) av	36487
L_45 (65) av	233272
L_45 (75) av	147056
L_45 (85) av	36218

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	5096	5088	5081	5077	5072	5070	5066	5062	5061	5058	5057	5053	5096	5088	5081	5077	5072	5070	5066
5	5083	5076	5069	5064	5061	5055	5050	5047	5043	5043	5037	5037	5078	5070	5066	5059	5056	5053	5051
10	5034	5027	5019	5015	5010	5005	5000	4998	4992	4990	4986	4983	5026	5018	5013	5008	5005	5002	5000
15	4948	4942	4933	4929	4925	4921	4916	4913	4907	4905	4899	4899	4940	4931	4927	4922	4921	4917	4916
20	4826	4820	4810	4808	4804	4802	4797	4796	4787	4786	4779	4781	4818	4810	4807	4801	4801	4796	4799
25	4667	4661	4652	4650	4644	4645	4638	4635	4629	4628	4619	4623	4660	4651	4650	4641	4642	4637	4641
30	4468	4464	4454	4454	4446	4447	4440	4441	4433	4431	4422	4426	4465	4455	4452	4444	4445	4440	4443
35	4223	4222	4214	4214	4206	4210	4200	4205	4194	4196	4184	4189	4223	4213	4216	4204	4207	4198	4201
40	3935	3938	3928	3931	3920	3926	3917	3921	3909	3913	3901	3906	3938	3923	3928	3916	3923	3911	3914
45	3603	3609	3599	3605	3594	3600	3590	3594	3581	3587	3575	3581	3608	3591	3597	3586	3592	3583	3588
50	3221	3233	3222	3227	3213	3223	3208	3217	3205	3212	3197	3207	3231	3213	3220	3207	3214	3203	3211
55	2797	2813	2794	2808	2788	2805	2783	2794	2781	2794	2774	2791	2812	2787	2799	2783	2795	2776	2794
60	2322	2338	2317	2335	2317	2330	2308	2319	2304	2322	2299	2317	2337	2314	2324	2304	2319	2297	2314
65	1734	1755	1737	1756	1732	1747	1726	1741	1727	1749	1725	1738	1754	1727	1741	1719	1737	1718	1741
70	1208	1208	1193	1208	1190	1200	1185	1197	1189	1199	1187	1195	1209	1195	1203	1186	1198	1186	1197
75	667	680	671	679	666	678	664	675	661	675	661	678	682	670	675	663	668	662	671
80	262	278	263	275	261	278	262	275	259	273	263	277	281	263	277	260	274	258	274
85	53.8	56.6	54.1	56.5	54.3	57.2	54.8	56.8	53.9	57.0	54.6	57.3	57.9	54.9	58.1	55.2	57.4	54.6	57.1
90	6.24	6.14	6.20	6.12	6.17	6.11	6.18	6.11	6.20	6.15	6.23	6.20	4.48	4.37	4.40	4.36	4.37	4.34	4.38
95	9.43	9.31	9.37	9.25	9.33	9.24	9.35	9.25	9.37	9.29	9.40	9.31	7.15	7.22	7.18	7.25	7.18	7.23	7.16
100	13.7	13.5	13.6	13.4	13.6	13.4	13.6	13.5	13.6	13.5	13.7	13.5	11.1	11.2	11.1	11.3	11.1	11.2	11.1
105	18.8	18.6	18.7	18.5	18.6	18.5	18.7	18.5	18.7	18.5	18.8	18.6	15.9	16.1	16.0	16.2	16.0	16.2	16.0
110	24.3	24.1	24.2	23.9	24.1	23.9	24.1	24.0	24.2	24.0	24.2	24.1	21.3	21.5	21.5	21.7	21.5	21.7	21.5
115	29.8	29.5	29.6	29.4	29.6	29.3	29.6	29.4	29.6	29.5	29.7	29.6	27.1	27.1	26.6	27.2	27.1	27.2	27.1
120	35.2	34.9	35.0	34.8	34.9	34.7	34.9	34.8	35.0	34.9	35.1	35.0	32.6	32.7	32.4	32.3	32.1	32.6	32.5
125	40.0	39.8	39.8	39.6	39.7	39.6	39.7	39.6	39.8	39.7	39.9	39.8	37.8	38.0	37.8	37.8	37.5	37.0	37.6
130	44.2	44.0	44.0	43.8	43.9	43.8	44.0	43.9	44.0	43.9	44.1	44.0	42.8	42.8	42.7	42.7	42.5	42.5	42.0
135	48.2	48.0	47.9	47.8	47.8	47.8	47.9	47.8	48.0	47.9	48.0	48.0	47.2	47.2	47.1	47.2	47.1	47.0	46.9
140	51.7	51.5	51.4	51.3	51.3	51.3	51.4	51.4	51.5	51.5	51.6	51.5	51.3	51.2	51.2	51.2	51.1	51.0	51.0
145	54.8	54.6	54.5	54.4	54.4	54.4	54.6	54.5	54.6	54.6	54.7	54.6	54.9	54.8	54.8	54.8	54.8	54.7	54.6
150	57.6	57.5	57.4	57.2	57.3	57.3	57.4	57.4	57.5	57.4	57.5	57.4	58.2	58.1	58.1	58.1	58.1	58.1	57.9
155	60.8	60.6	60.5	60.4	60.5	60.5	60.6	60.5	60.6	60.6	60.6	60.5	62.0	61.8	61.8	61.8	61.8	61.8	61.7
160	62.9	62.8	62.7	62.6	62.6	62.7	62.7	62.7	62.8	62.7	62.8	62.7	62.0	61.8	61.8	61.8	61.9	61.8	61.8
165	64.8	64.7	64.6	64.6	64.6	64.6	64.7	64.7	64.7	64.7	64.7	64.6	62.6	62.6	62.6	62.6	62.6	62.6	62.5
170	71.6	72.3	71.5	72.2	73.0	73.2	73.3	73.4	73.3	73.3	73.3	73.5	64.0	64.0	64.3	64.4	64.5	64.4	64.4
175	70.8	70.7	70.8	72.2	72.0	72.4	72.7	72.9	72.9	73.0	73.1	73.1	66.0	65.6	65.7	66.0	66.5	66.5	66.5
180	67.1	67.0	68.3	68.2	68.6	69.2	69.2	69.2	69.3	69.3	69.3	69.2	67.2	67.0	68.3	68.1	68.6	69.1	69.2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:222.38V I:0.4352A P:98.024W PF:0.9874 Freq:49.96Hz Lamp Flux:14648.4x1 lm		
NAME:	FDUFO-DS-150W-5K-120M-D	TYPE:
MFR.:	Factory Direct Lighting	

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	5062	5061	5058	5057	5053														
5	5048	5048	5045	5042	5041														
10	4998	5000	4998	4995	4992														
15	4914	4914	4911	4912	4907														
20	4795	4795	4790	4791	4787														
25	4635	4636	4631	4631	4626														
30	4436	4438	4432	4432	4428														
35	4192	4196	4189	4195	4188														
40	3904	3911	3903	3910	3901														
45	3576	3584	3574	3583	3572														
50	3198	3211	3198	3207	3195														
55	2774	2794	2775	2790	2772														
60	2295	2320	2298	2317	2299														
65	1716	1737	1716	1737	1720														
70	1187	1200	1184	1201	1190														
75	663	673	662	669	661														
80	259	275	260	276	260														
85	54.0	56.3	53.5	56.0	54.1														
90	4.33	4.36	4.32	4.35	4.32														
95	7.21	7.15	7.21	7.15	7.20														
100	11.2	11.1	11.2	11.1	11.2														
105	16.2	16.0	16.2	16.0	16.2														
110	21.6	21.5	21.7	21.6	21.7														
115	27.2	27.0	27.3	27.1	27.3														
120	32.7	32.5	32.7	32.6	32.7														
125	37.8	37.7	38.0	37.9	38.0														
130	41.8	41.6	42.1	42.6	42.9														
135	46.9	46.7	46.8	46.4	46.2														
140	51.0	50.9	50.9	50.8	50.8														
145	54.6	54.6	54.7	54.6	54.6														
150	58.0	57.9	58.0	58.0	58.0														
155	61.7	61.7	61.8	61.8	61.8														
160	61.7	61.8	61.8	61.8	61.8														
165	62.5	62.6	62.6	62.6	62.6														
170	64.4	64.4	64.4	64.5	64.5														
175	66.5	66.5	66.5	66.5	66.5														
180	69.2	69.2	69.2	69.3	69.2														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:C
 Test Date:10 April 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.000m [K=1.0125]
 Remarks: