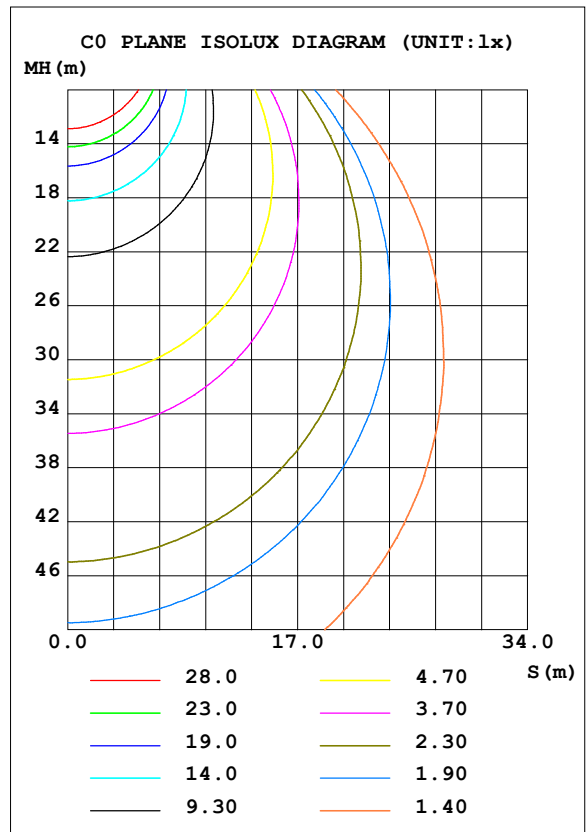
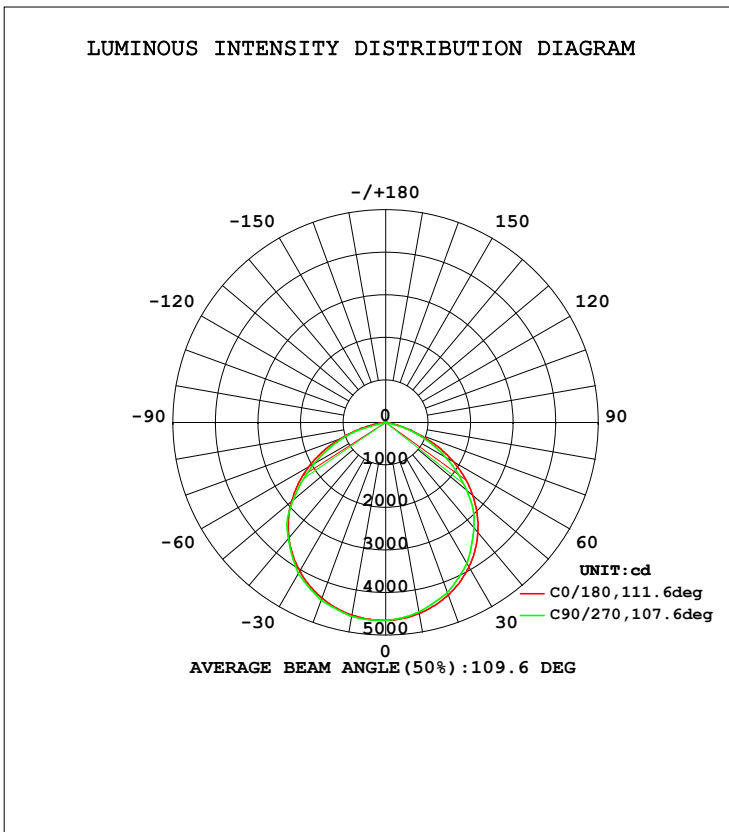


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.18 lm/W			
MODEL	TG-CNX-0150-E01	I <sub>max</sub> (cd)	4655	S/MH (C0/180)	1.25
NOMINAL POWER (W)	140	LOR (%)	98.3	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	12369	η UP, DN (C0-180)	0.0, 47.0
NOMINAL FLUX (lm)	12582.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	219.1	η down (%)	98.3	CIBSE SHR MAX	1.35



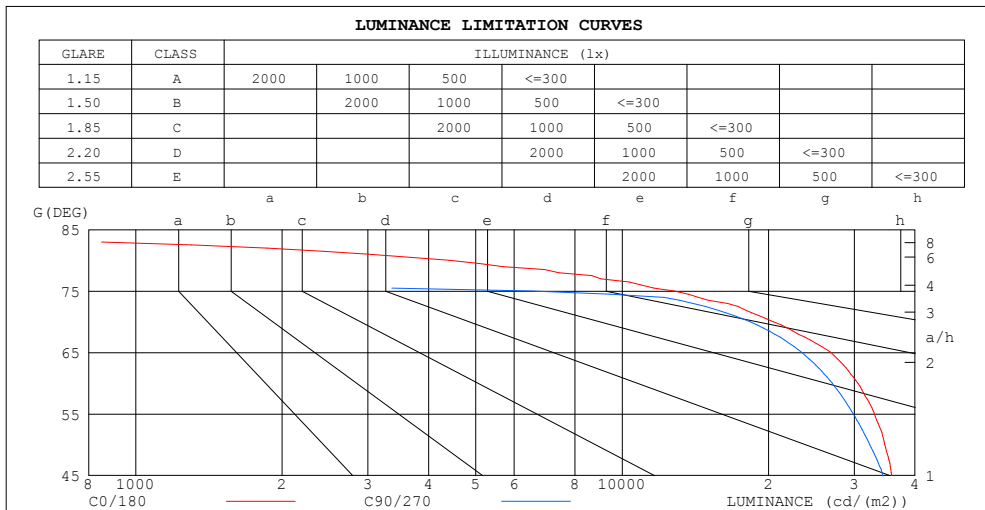
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: YP  
 Test Date: 2021-07-26

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity: 65.0%  
 Test Distance: 8.884m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
5	4625	4608	4606	4619	4641	4653	4653	4644	0- 5	110.9	110.9	0.90,0.88
10	4557	4528	4524	4552	4597	4623	4629	4598	5- 10	329.3	440.2	3.56,3.5
15	4453	4405	4389	4446	4513	4550	4536	4513	10- 15	536.7	977.0	7.9,7.76
20	4313	4237	4254	4289	4390	4427	4443	4376	15- 20	726.4	1703	13.8,13.5
25	4138	4055	4040	4116	4235	4286	4274	4226	20- 25	893.1	2596	21,20.6
30	3917	3827	3825	3896	4039	4101	4106	4030	25- 30	1029	3626	29.3,28.8
35	3664	3553	3525	3640	3810	3875	3834	3785	30- 35	1131	4757	38.5,37.8
40	3371	3256	3226	3362	3540	3625	3563	3518	35- 40	1191	5948	48.1,47.3
45	3042	2897	2913	3006	3233	3289	3273	3176	40- 45	1210	7157	57.9,56.9
50	2673	2526	2492	2648	2890	2944	2843	2823	45- 50	1182	8340	67.4,66.3
55	2273	2141	2057	2268	2508	2577	2395	2459	50- 55	1100	9440	76.3,75
60	1832	1698	1622	1812	2093	2105	1946	1981	55- 60	971.6	10412	84.2,82.7
65	1362	1260	1187	1367	1646	1625	1498	1506	60- 65	804.8	11216	90.7,89.1
70	838.1	838.5	751.9	928.6	1148	1154	1050	1052	65- 70	606.8	11823	95.6,94
75	397.1	434.8	201.9	500.5	673.3	699.6	345.7	610.0	70- 75	389.1	12212	98.7,97.1
80	91.82	0.1502	0	0.1981	250.6	0.3708	0	0.2921	75- 80	135.4	12348	99.8,98.1
85	2.942	0	0	0	35.89	0	0	0	80- 85	20.38	12368	100,98.3
90	0.5261	0	0	0	2.462	0	0	0	85- 90	0.6260	12369	100,98.3
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	281	0
80	4406	0
75	12785	6502
70	20420	18319
65	26865	23402
60	30538	27030
55	33030	29882
50	34656	32304
45	35848	34332

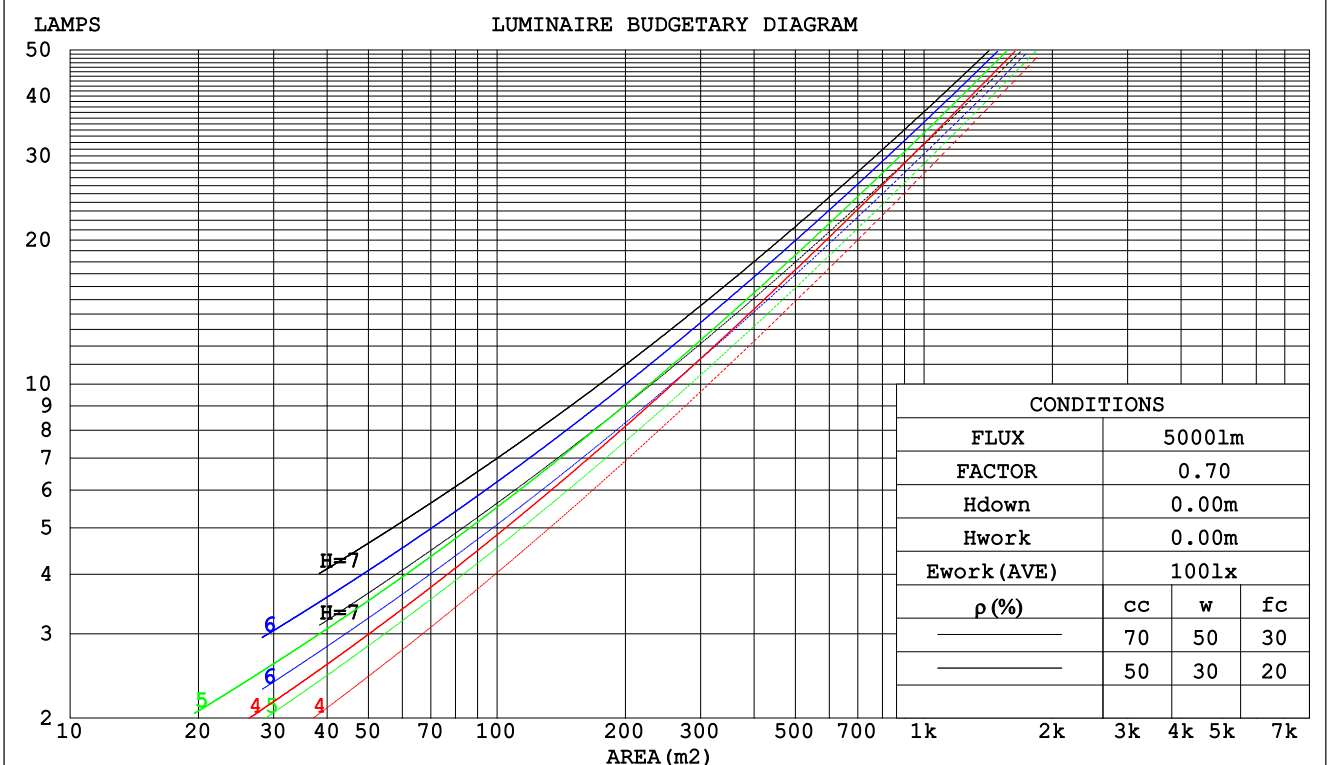
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:YP  
Test Date:2021-07-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity:65.0%  
Test Distance:8.884m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION 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	1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.04	1.00	.97	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.87	.85
2.0	.91	.85	.80	.89	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.72
3.0	.80	.73	.67	.79	.72	.66	.76	.70	.65	.73	.68	.64	.71	.67	.63	.61
4.0	.71	.63	.57	.70	.62	.56	.68	.61	.56	.65	.60	.55	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.53	.47	.42	.52	.46	.42	.40
7.0	.52	.44	.38	.51	.43	.38	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.34	.47	.39	.34	.46	.39	.34	.44	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.40	.33	.28	.40	.32	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:YP  
 Test Date:2021-07-26

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity:65.0%  
 Test Distance:8.884m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION 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	.271	.154	.049	.264	.151	.048	.251	.144	.046	.240	.138	.044	.229	.133	.043	
2.0	.264	.145	.044	.258	.142	.044	.247	.137	.043	.237	.133	.042	.227	.128	.041	
3.0	.250	.133	.040	.244	.131	.039	.234	.127	.039	.225	.123	.038	.217	.120	.037	
4.0	.233	.121	.036	.229	.120	.035	.220	.117	.035	.212	.114	.034	.204	.111	.034	
5.0	.218	.111	.032	.214	.110	.032	.206	.107	.032	.198	.105	.031	.192	.102	.031	
6.0	.203	.102	.029	.200	.101	.029	.193	.099	.029	.186	.097	.028	.180	.095	.028	
7.0	.190	.094	.027	.187	.093	.027	.181	.091	.026	.175	.090	.026	.169	.088	.026	
8.0	.178	.087	.024	.175	.086	.024	.170	.085	.024	.164	.083	.024	.159	.082	.024	
9.0	.168	.081	.023	.165	.080	.023	.160	.079	.022	.155	.078	.022	.151	.076	.022	
10.0	.158	.076	.021	.156	.075	.021	.151	.074	.021	.147	.073	.021	.143	.072	.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	.187	.187	.187	.160	.160	.160	.109	.109	.109	.063	.063	.063	.020	.020	.020	
1.0	.175	.154	.135	.150	.132	.116	.102	.091	.080	.059	.053	.047	.019	.017	.015	
2.0	.166	.130	.099	.142	.112	.086	.098	.077	.060	.056	.045	.035	.018	.015	.011	
3.0	.159	.112	.075	.136	.097	.065	.093	.067	.046	.054	.039	.027	.017	.013	.009	
4.0	.151	.099	.059	.130	.086	.051	.089	.060	.036	.052	.035	.021	.017	.011	.007	
5.0	.144	.089	.048	.124	.077	.041	.085	.054	.029	.049	.031	.017	.016	.010	.006	
6.0	.138	.080	.039	.118	.070	.034	.082	.049	.024	.047	.029	.014	.015	.009	.005	
7.0	.131	.074	.033	.113	.064	.029	.078	.045	.021	.045	.026	.012	.015	.009	.004	
8.0	.125	.068	.029	.108	.059	.025	.074	.041	.018	.043	.024	.011	.014	.008	.004	
9.0	.119	.063	.025	.103	.055	.022	.071	.038	.016	.041	.023	.009	.013	.007	.003	
10.0	.114	.059	.022	.098	.051	.020	.068	.036	.014	.040	.021	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:YP  
 Test Date:2021-07-26

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity:65.0%  
 Test Distance:8.884m [K=1.0000]  
 Remarks:

## Uncorrected UGR Table

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm										
NAME: LED Flood Light150W					TYPE:Outdoor			WEIGHT:		
SPEC.:TG-CNX-0150-E01					DIM.:			SERIAL No.:		
MFR.:					SUR.:1.130*0.105			PROTECTION 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	24.7	26.2	25.0	26.4	26.6	24.3	25.8	24.6	26.0	26.2
3H	25.7	27.0	26.0	27.2	27.5	25.2	26.6	25.5	26.8	27.0
4H	25.8	27.1	26.1	27.3	27.6	25.3	26.6	25.6	26.8	27.1
6H	25.8	27.0	26.1	27.2	27.5	25.2	26.4	25.5	26.7	27.0
8H	25.7	26.9	26.1	27.2	27.4	25.2	26.3	25.5	26.6	26.9
12H	25.7	26.8	26.0	27.1	27.4	25.1	26.2	25.5	26.5	26.8
4H 2H	25.2	26.4	25.5	26.7	26.9	24.8	26.1	25.1	26.4	26.6
3H	26.2	27.3	26.6	27.6	27.9	25.8	27.0	26.2	27.2	27.5
4H	26.5	27.5	26.8	27.8	28.1	26.0	27.0	26.3	27.3	27.6
6H	26.5	27.4	26.9	27.7	28.1	25.9	26.8	26.3	27.1	27.5
8H	26.4	27.3	26.9	27.6	28.0	25.8	26.7	26.2	27.0	27.4
12H	26.4	27.2	26.8	27.5	27.9	25.8	26.5	26.2	26.9	27.3
8H 4H	26.5	27.3	26.9	27.7	28.1	26.0	26.9	26.4	27.2	27.6
6H	26.6	27.2	27.0	27.7	28.1	25.9	26.6	26.4	27.0	27.4
8H	26.5	27.1	27.0	27.6	28.0	25.9	26.5	26.4	26.9	27.4
12H	26.5	27.0	27.0	27.5	27.9	25.9	26.4	26.3	26.8	27.3
12H 4H	26.5	27.2	26.9	27.6	28.0	26.0	26.7	26.4	27.1	27.5
6H	26.5	27.1	27.0	27.6	28.0	25.9	26.5	26.4	26.9	27.4
8H	26.5	27.0	27.0	27.5	27.9	25.9	26.4	26.4	26.8	27.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4				
1.5H	+ 0.3 / - 0.3					+ 0.3 / - 0.6				
2.0H	+ 0.6 / - 0.7					+ 0.6 / - 0.7				

CIE Pub.117 Corrected 12583 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.8)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:YP  
Test Date:2021-07-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity:65.0%  
Test Distance:8.884m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION ANGLE:

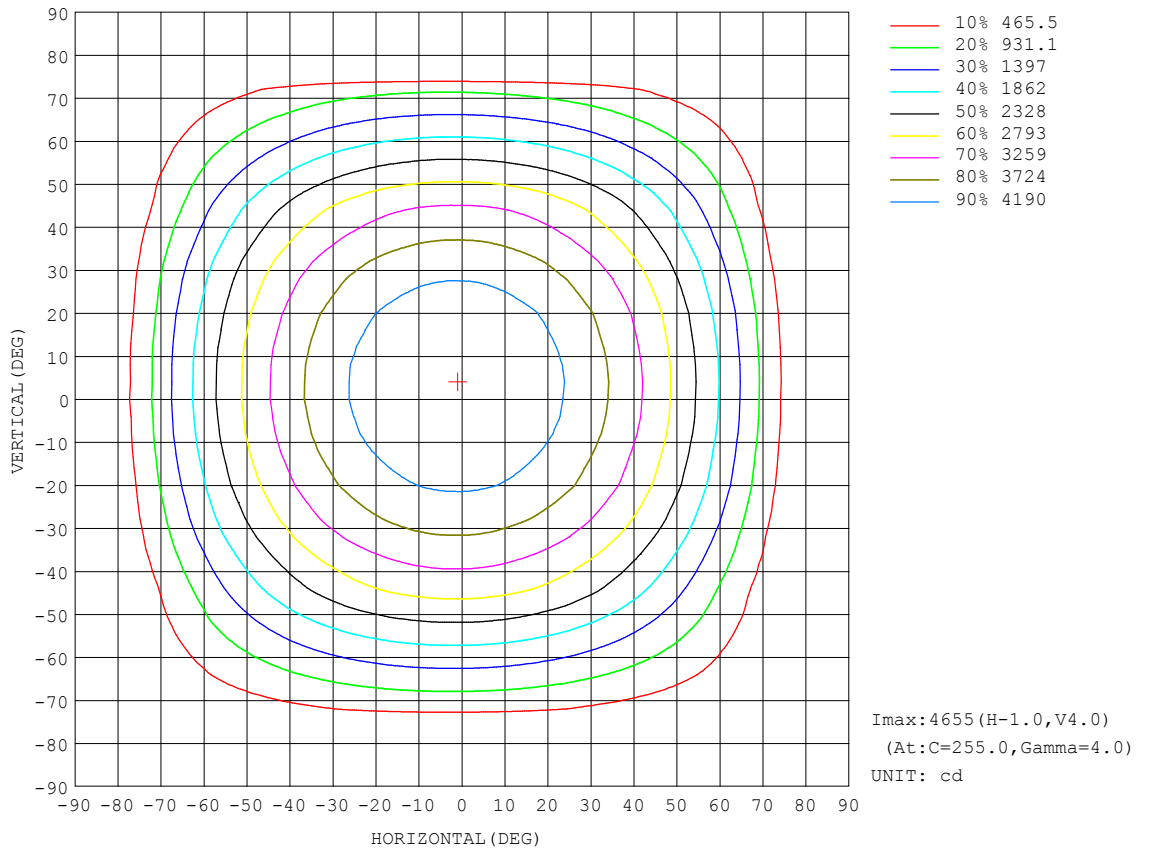
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	57	47	40	56	46	40	34
0.80	68	57	50	67	57	50	66	56	50	43
1.00	77	67	60	76	66	59	74	67	59	52
1.25	84	74	68	83	74	67	80	72	67	60
1.50	89	80	73	87	79	73	84	77	72	65
2.00	95	88	82	94	87	81	90	84	80	72
2.50	99	92	87	97	91	86	94	88	84	76
3.00	102	96	91	100	95	90	96	92	88	80
4.00	106	101	97	104	99	95	100	96	93	84
5.00	108	104	100	106	102	99	101	98	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:YP  
 Test Date:2021-07-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity:65.0%  
 Test Distance:8.884m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION ANGLE:

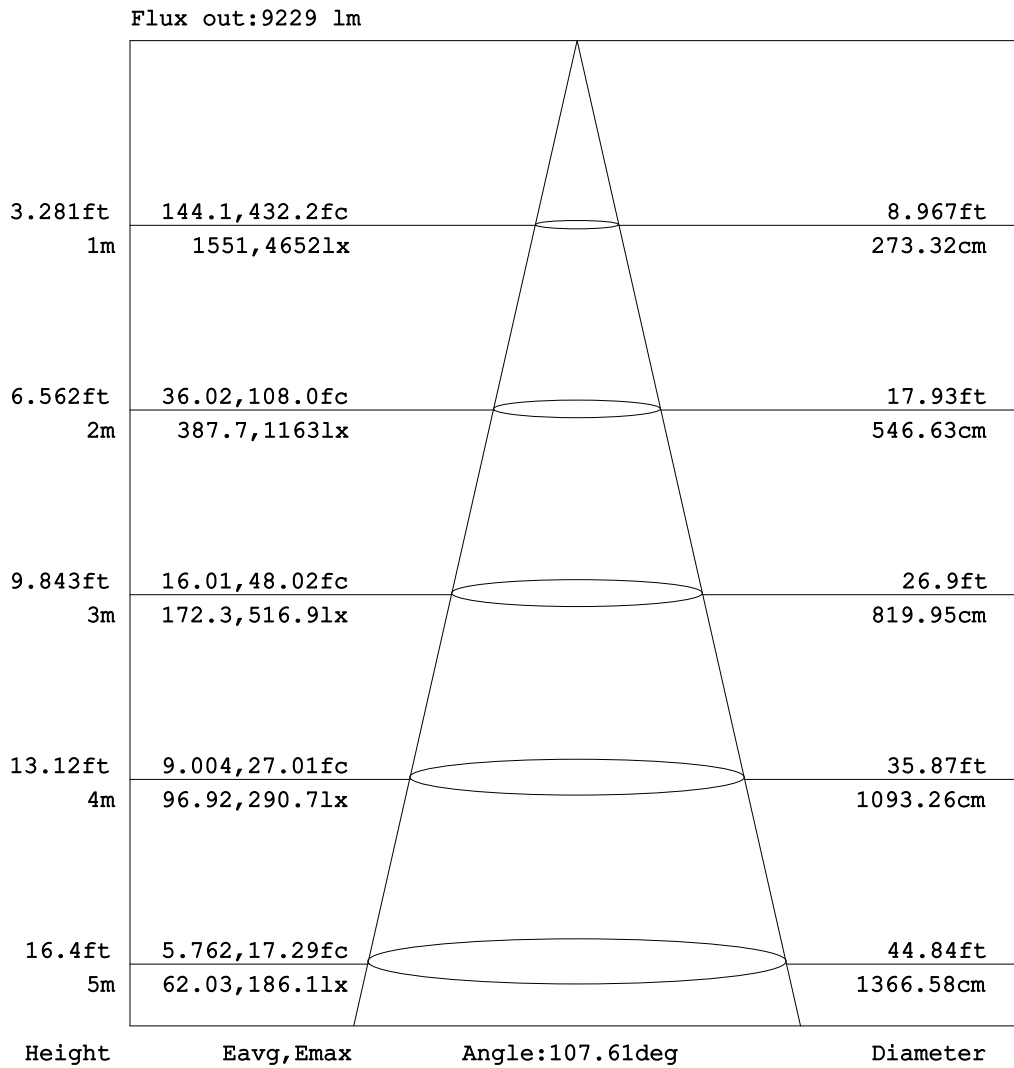


C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: YP  
 Test Date: 2021-07-26

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity: 65.0%  
 Test Distance: 8.884m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION ANGLE:



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

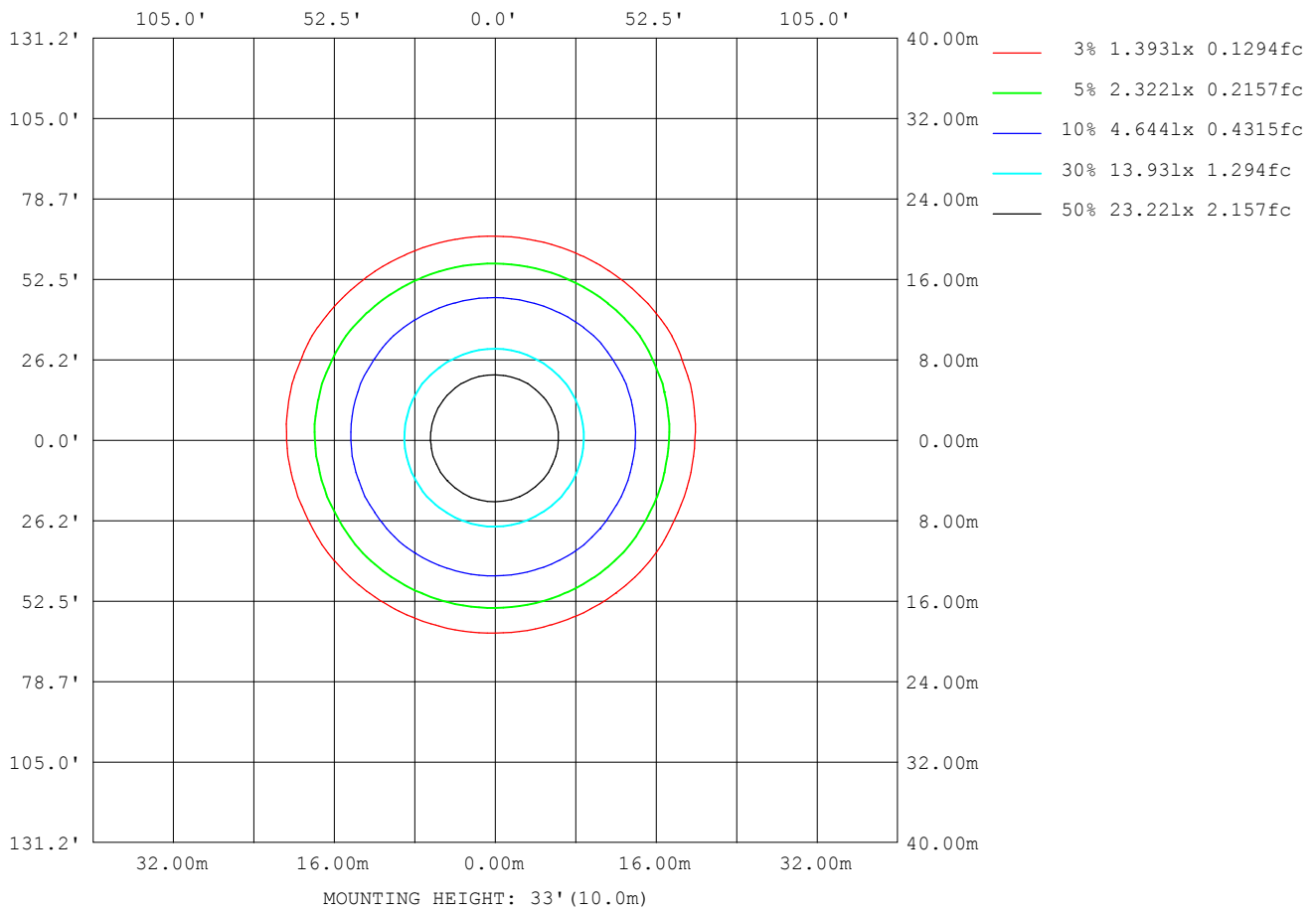
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:YP  
 Test Date:2021-07-26

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity:65.0%  
 Test Distance:8.884m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

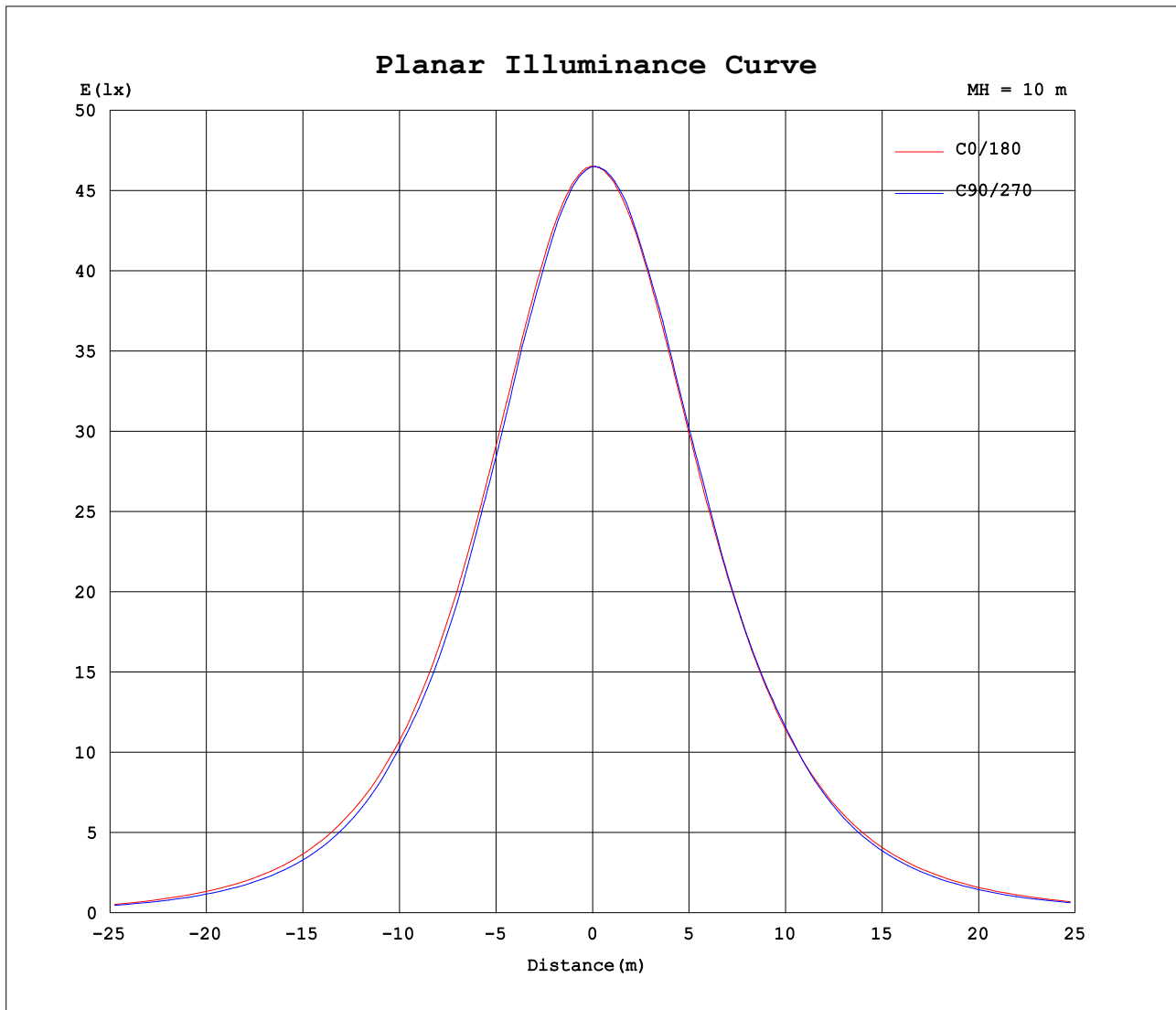
Test:U:219.1V I:0.6810A P:138.7W PF:0.9290 Lamp Flux:12582.6x1 lm		
NAME: LED Flood Light150W	TYPE:Outdoor	WEIGHT:
SPEC.:TG-CNX-0150-E01	DIM.:	SERIAL No.:
MFR.:	SUR.:1.130*0.105	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:YP  
 Test Date:2021-07-26

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity:65.0%  
 Test Distance:8.884m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: YP  
Test Date: 2021-07-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity: 65.0%  
Test Distance: 8.884m [K=1.0000]  
Remarks:







