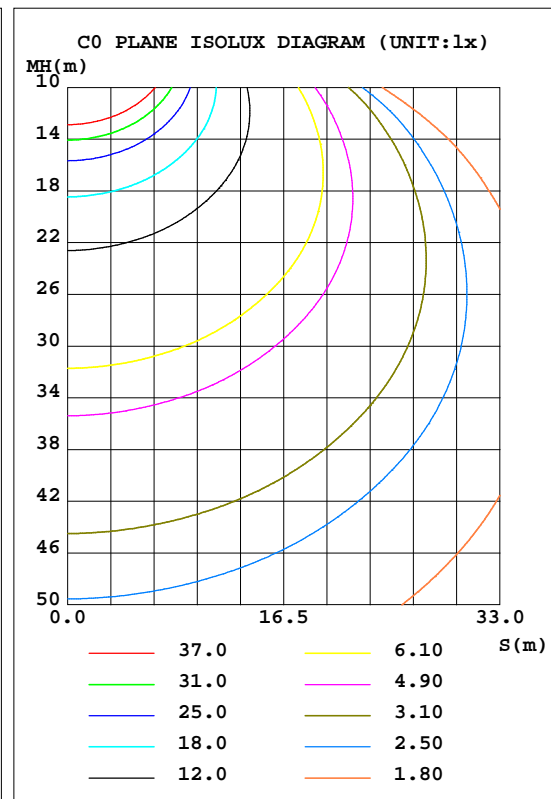
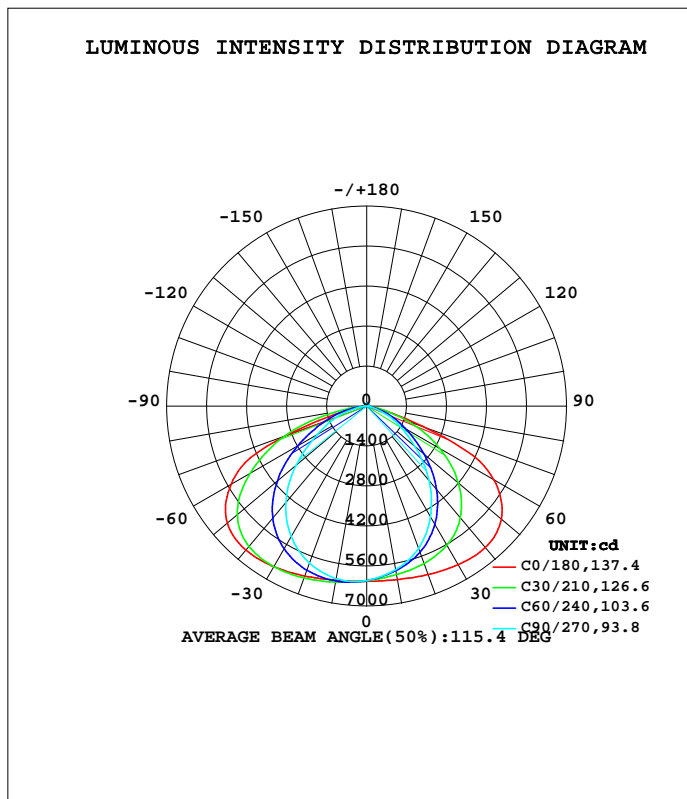


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.60 lm/W			
MODEL	T150-150W	I <sub>max</sub> (cd)	6582	S/MH(C0/180)	1.63
NOMINAL POWER(W)	147	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	18806	η UP, DN(C0-180)	0.7,44.6
NOMINAL FLUX(lm)	18806.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.6,54.1
LAMPS INSIDE	1	η up(%)	1.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.1	η down(%)	98.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [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	6166	5922	5818	5966	6189	6237	6133	6091	0- 10	580.9	580.9	3.09,3.09
20	6280	5659	5305	5752	6332	6260	5852	5959	10- 20	1699	2280	12.1,12.1
30	6407	5201	4473	5343	6494	6135	5283	5647	20- 30	2671	4951	26.3,26.3
40	6463	4457	3401	4637	6582	5766	4407	5060	30- 40	3359	8310	44.2,44.2
50	6156	3413	2215	3615	6369	4994	3232	4088	40- 50	3590	11899	63.3,63.3
60	5133	2254	1289	2454	5483	3753	2001	2799	50- 60	3242	15141	80.5,80.5
70	2092	1115	485.4	1318	2978	2302	1104	1554	60- 70	2340	17482	93,93
80	217.1	165.6	56.50	300.7	345.0	757.5	251.7	441.4	70- 80	948.5	18430	98,98
90	15.38	13.33	10.11	9.875	11.59	15.77	10.60	7.781	80- 90	122.0	18552	98.6,98.6
100	27.31	23.16	16.76	17.81	20.71	12.80	10.47	13.33	90-100	14.80	18567	98.7,98.7
110	40.19	34.65	24.99	27.25	35.99	21.44	16.83	22.18	100-110	23.49	18591	98.9,98.9
120	50.13	45.62	34.55	36.51	50.35	34.97	26.02	33.35	110-120	32.64	18623	99,99
130	57.31	55.26	43.99	45.44	61.44	49.23	37.23	44.98	120-130	39.26	18663	99.2,99.2
140	63.59	62.52	53.36	53.53	70.68	62.41	48.52	55.57	130-140	41.76	18704	99.5,99.5
150	69.94	70.56	64.78	62.89	75.20	68.49	56.93	61.92	140-150	39.13	18743	99.7,99.7
160	77.32	79.36	76.70	72.91	80.03	75.81	68.18	69.21	150-160	32.44	18776	99.8,99.8
170	83.83	86.80	85.62	80.67	87.44	87.30	82.44	79.82	160-170	22.41	18798	100,100
180	89.31	91.78	90.03	85.20	89.92	91.97	89.84	85.34	170-180	8.218	18806	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 10111 lm

%lum = 53.8%  
%lamp = 53.8%

Conical surface Flux(120deg): 15141 lm

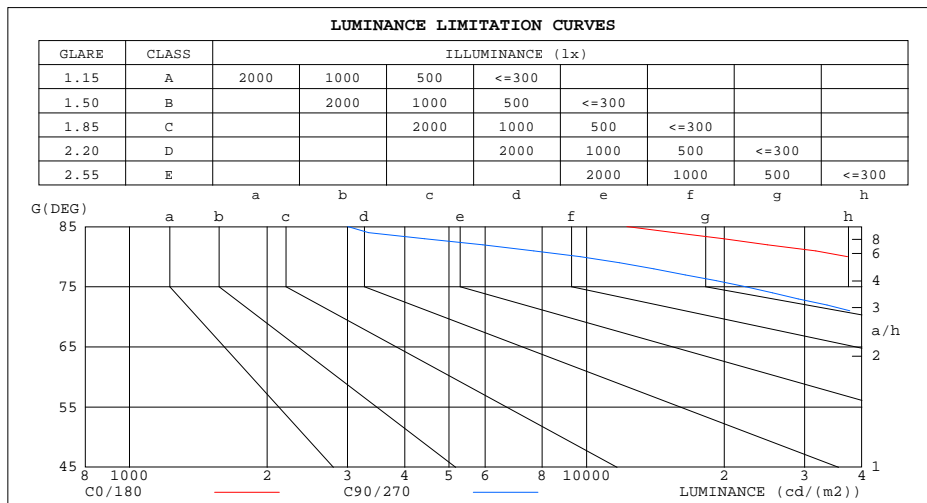
%lum = 80.5%  
%lamp = 80.5%

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:11 November 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.800m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	12256	3005
80	37214	9683
75	86420	22281
70	182069	42240
65	288973	65106
60	305556	76734
55	298602	88614
50	285018	102573
45	268502	117685

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.290	.165	.052	.283	.161	.051	.269	.154	.049	.256	.148	.047	.244	.142	.046	
2.0	.280	.154	.047	.274	.151	.046	.261	.145	.045	.250	.140	.044	.239	.135	.043	
3.0	.263	.140	.042	.257	.138	.041	.246	.133	.041	.236	.129	.040	.227	.125	.039	
4.0	.245	.127	.037	.239	.125	.037	.230	.122	.036	.221	.119	.036	.212	.115	.035	
5.0	.227	.116	.034	.223	.114	.033	.214	.112	.033	.206	.109	.032	.199	.106	.032	
6.0	.212	.106	.030	.208	.105	.030	.200	.102	.030	.193	.100	.029	.186	.098	.029	
7.0	.198	.098	.028	.194	.097	.028	.187	.095	.027	.180	.093	.027	.174	.091	.027	
8.0	.185	.090	.025	.182	.089	.025	.175	.088	.025	.169	.086	.025	.164	.084	.025	
9.0	.174	.084	.023	.171	.083	.023	.165	.082	.023	.160	.080	.023	.155	.078	.023	
10.0	.163	.078	.022	.161	.078	.022	.155	.076	.021	.151	.075	.021	.146	.073	.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	.201	.201	.201	.172	.172	.172	.117	.117	.117	.067	.067	.067	.022	.022	.022	
1.0	.189	.167	.146	.162	.143	.126	.111	.098	.087	.064	.057	.051	.020	.018	.016	
2.0	.181	.142	.110	.155	.123	.095	.106	.085	.066	.061	.049	.039	.020	.016	.013	
3.0	.174	.125	.086	.149	.108	.074	.102	.075	.052	.059	.044	.031	.019	.014	.010	
4.0	.166	.111	.070	.143	.096	.060	.098	.067	.043	.057	.039	.025	.018	.013	.008	
5.0	.159	.101	.058	.137	.087	.051	.094	.061	.036	.055	.036	.021	.018	.012	.007	
6.0	.152	.093	.050	.131	.080	.044	.090	.056	.031	.052	.033	.018	.017	.011	.006	
7.0	.146	.086	.044	.125	.074	.038	.087	.052	.027	.050	.031	.016	.016	.010	.005	
8.0	.139	.080	.039	.120	.069	.034	.083	.049	.024	.048	.029	.015	.016	.009	.005	
9.0	.133	.075	.036	.115	.065	.031	.080	.046	.022	.046	.027	.013	.015	.009	.004	
10.0	.128	.071	.033	.110	.062	.029	.076	.043	.021	.045	.026	.012	.014	.008	.004	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm										
NAME: LED FLOOD LIGHT					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: EVERFINE					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	22.5	24.0	22.8	24.2	24.5	17.1	18.6	17.3	18.8	19.0
3H	23.9	25.2	24.2	25.5	25.8	17.6	19.0	17.9	19.2	19.5
4H	24.0	25.3	24.3	25.5	25.8	17.6	18.9	17.9	19.2	19.5
6H	23.9	25.1	24.3	25.4	25.7	17.5	18.8	17.9	19.1	19.4
8H	23.9	25.1	24.2	25.4	25.7	17.5	18.7	17.8	19.0	19.3
12H	23.8	25.0	24.2	25.3	25.6	17.4	18.6	17.8	18.9	19.2
4H 2H	22.5	23.8	22.9	24.1	24.4	18.1	19.4	18.5	19.7	20.0
3H	24.0	25.1	24.4	25.4	25.8	18.7	19.9	19.1	20.2	20.5
4H	24.2	25.2	24.6	25.5	25.9	18.8	19.8	19.2	20.2	20.5
6H	24.2	25.1	24.6	25.4	25.8	18.7	19.6	19.2	20.0	20.4
8H	24.1	25.0	24.6	25.4	25.8	18.7	19.5	19.1	19.9	20.3
12H	24.1	24.9	24.5	25.3	25.7	18.6	19.4	19.1	19.8	20.3
8H 4H	24.1	24.9	24.5	25.3	25.7	19.1	19.9	19.5	20.3	20.7
6H	24.1	24.8	24.6	25.2	25.7	19.0	19.7	19.5	20.1	20.6
8H	24.1	24.7	24.6	25.2	25.6	19.0	19.6	19.5	20.1	20.5
12H	24.1	24.6	24.6	25.0	25.6	19.0	19.5	19.5	19.9	20.5
12H 4H	24.1	24.8	24.5	25.2	25.7	19.0	19.8	19.5	20.2	20.6
6H	24.1	24.7	24.6	25.1	25.6	19.0	19.6	19.5	20.1	20.5
8H	24.1	24.6	24.6	25.0	25.6	19.0	19.5	19.5	20.0	20.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.6 / - 0.8				
1.5H	+ 0.6 / - 0.6					+ 0.3 / - 0.5				
2.0H	+ 1.7 / - 2.1					+ 0.7 / - 1.2				

CIE Pub.117, 18806 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.2)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

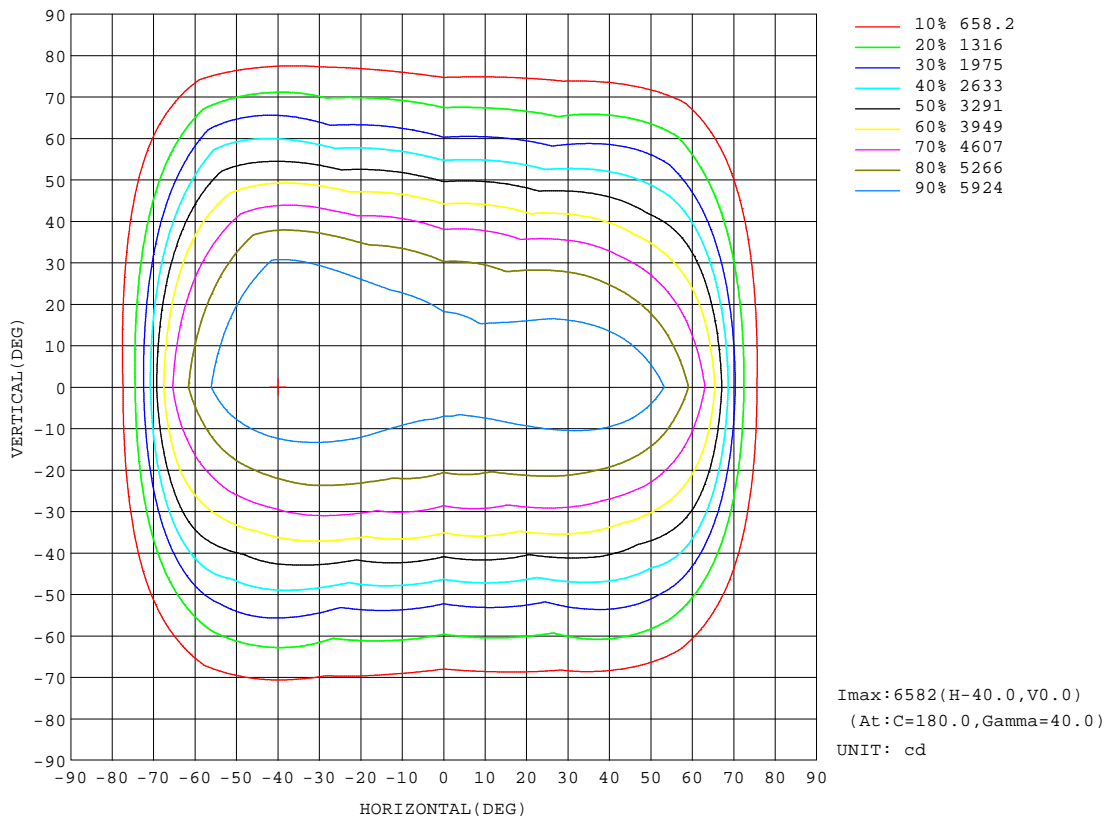
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	65	58	75	64	58	72	66	57	50
1.25	83	73	66	82	72	66	79	71	65	57
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	81	94	86	80	90	84	78	70
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	91	100	94	90	96	91	87	79
4.00	107	101	97	104	99	95	100	96	92	83
5.00	109	104	101	106	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: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



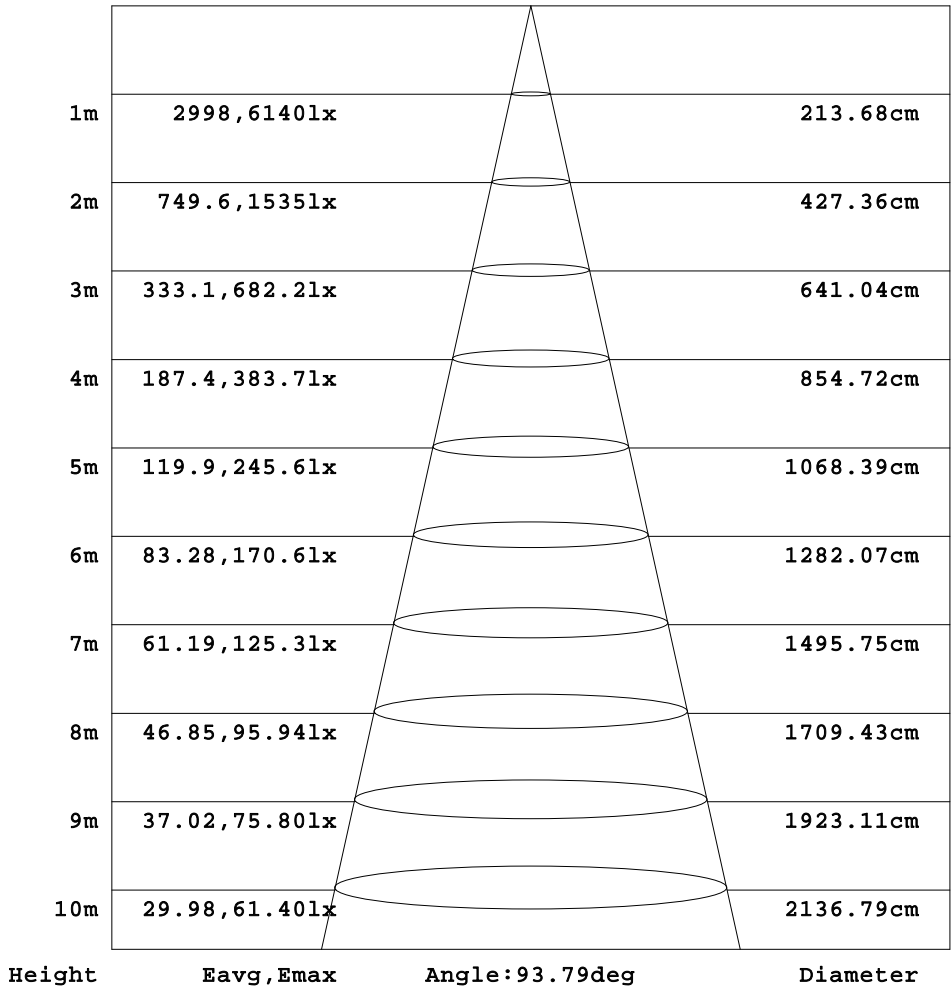
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.800m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Flux out:10832 lm



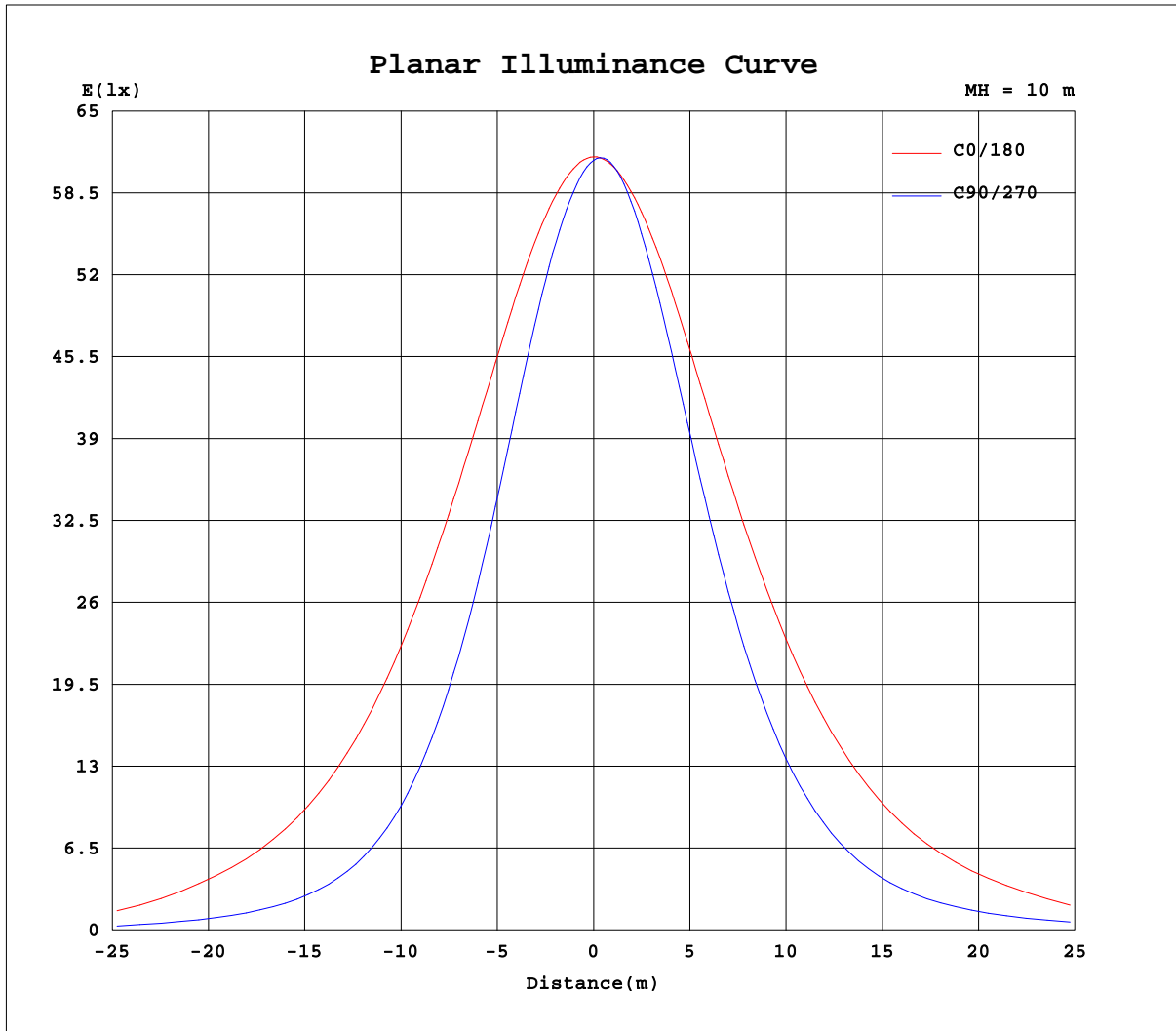
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [K=1.0000]  
 Remarks:



**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 11 November 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.800m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:218.6V I:0.6640A P:144.0W PF:0.9910 Freq:50.00Hz Lamp Flux:18806.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	6137	6118	6114	6110	6101	6085	6137	6118	6114	6110	6101	6085						
5	6141	6050	5996	5986	6020	6062	6152	6184	6191	6164	6126	6097						
10	6166	5990	5854	5818	5899	6032	6189	6257	6218	6133	6084	6097						
15	6216	5937	5678	5600	5747	6004	6251	6331	6190	6024	5990	6089						
20	6280	5867	5450	5305	5540	5964	6332	6405	6116	5852	5845	6072						
25	6344	5768	5152	4930	5264	5895	6414	6463	5981	5606	5633	6026						
30	6407	5625	4777	4473	4906	5780	6494	6494	5776	5283	5355	5939						
35	6459	5411	4330	3960	4468	5597	6557	6485	5494	4887	5003	5792						
40	6463	5104	3810	3401	3952	5323	6582	6412	5119	4407	4566	5554						
45	6379	4695	3234	2796	3389	4933	6533	6240	4647	3851	4042	5198						
50	6156	4191	2635	2215	2787	4442	6369	5912	4076	3232	3457	4718						
55	5755	3602	2058	1708	2197	3873	6033	5405	3461	2589	2810	4115						
60	5133	2945	1562	1289	1678	3229	5483	4719	2787	2001	2178	3419						
65	4103	2259	1130	924	1230	2551	4698	3917	2131	1524	1619	2700						
70	2092	1497	732	485	833	1802	2978	3046	1559	1104	1160	1947						
75	752	768	369	194	452	1054	1161	2015	1034	626	732	1197						
80	217	235	96.3	56.5	175	426	345	956	559	252	364	518						
85	35.9	15.0	9.72	8.80	17.8	57.7	66.2	293	174	74.5	94.7	75.7						
90	15.4	14.7	11.9	10.1	9.09	10.7	11.6	15.8	15.7	10.6	7.07	8.49						
95	21.1	20.1	15.8	13.2	12.2	15.1	15.2	11.1	8.23	7.92	8.25	11.6						
100	27.3	26.1	20.3	16.8	15.7	19.9	20.7	14.6	11.0	10.5	11.2	15.5						
105	33.8	32.3	25.3	20.6	19.7	24.9	27.8	18.8	14.2	13.6	14.2	20.5						
110	40.2	38.6	30.7	25.0	24.3	30.2	36.0	24.3	18.6	16.8	18.1	26.3						
115	45.7	44.5	36.0	29.7	28.9	35.2	43.5	31.2	24.5	21.1	22.9	32.2						
120	50.1	49.9	41.3	34.5	33.4	39.6	50.4	39.2	30.7	26.0	28.2	38.4						
125	53.8	54.8	46.5	39.2	38.1	43.9	56.3	46.7	37.5	31.5	33.8	44.8						
130	57.3	59.2	51.4	44.0	42.8	48.0	61.4	53.8	44.6	37.2	39.5	50.5						
135	60.7	62.5	55.7	48.8	47.3	51.9	66.2	60.8	51.5	42.9	45.3	55.6						
140	63.6	65.2	59.8	53.4	51.6	55.4	70.7	66.6	58.2	48.5	50.9	60.2						
145	66.2	67.8	64.0	58.3	56.2	58.8	73.5	70.4	62.7	52.5	55.9	62.0						
150	69.9	71.6	69.5	64.8	62.3	63.5	75.2	72.6	64.4	56.9	59.5	64.3						
155	73.7	75.3	74.7	71.0	68.1	67.8	77.2	75.4	67.5	62.0	63.1	67.1						
160	77.3	79.0	79.7	76.7	73.5	72.3	80.0	78.4	73.2	68.2	67.7	70.7						
165	80.8	82.6	84.3	81.8	78.2	76.3	84.0	83.3	80.4	75.3	74.0	75.1						
170	83.8	85.8	87.8	85.6	81.8	79.5	87.4	88.0	86.6	82.4	80.0	79.6						
175	86.8	88.7	90.7	88.5	84.7	82.3	89.0	90.0	90.2	86.9	84.0	82.2						
180	89.3	91.1	92.4	90.0	86.3	84.1	89.9	91.1	92.9	89.8	86.7	84.0						

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:11 November 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.800m [K=1.0000]  
 Remarks: