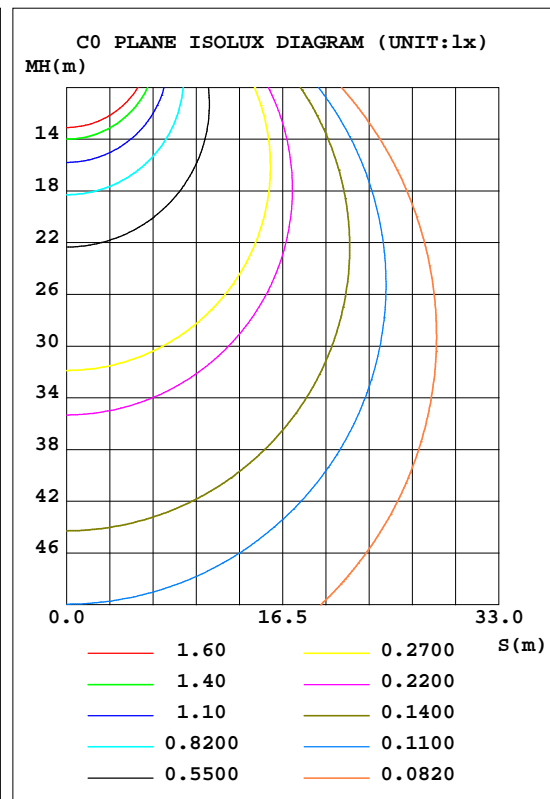
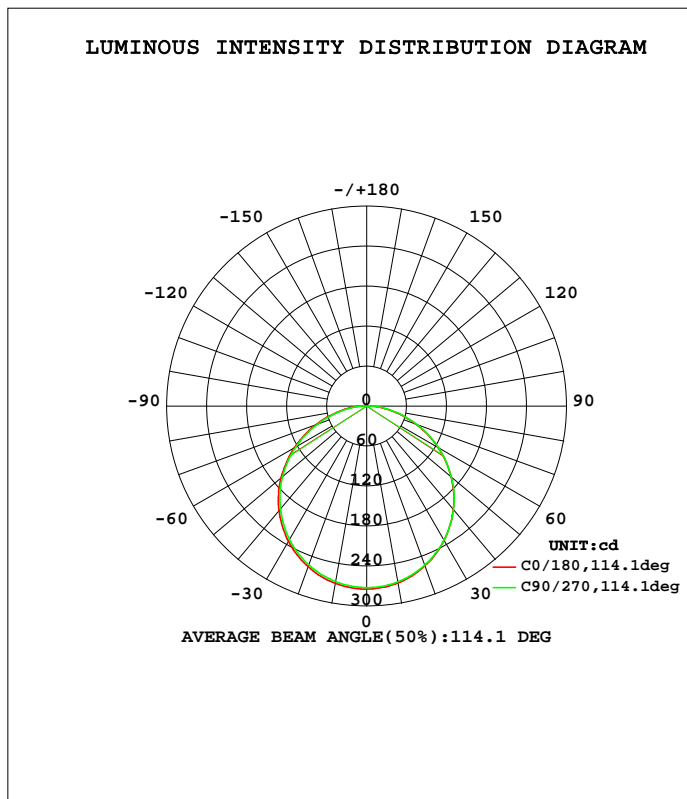


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 55.70 lm/W
MODEL	CSC3017-LED-15W-3K-WH	I _{max} (cd)	274.7	S/MH(C0/180)	1.26	
NOMINAL POWER(W)	14	LOR(%)	100.0	S/MH(C90/270)	1.27	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	806.01	η UP, DN(C0-180)	0.1, 49.8	
NOMINAL FLUX(lm)	806.008	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1, 50.0	
LAMPS INSIDE	1	η up(%)	0.1	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120.1	η down(%)	99.9	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity: 65.0%
 Test Distance: 6.710m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	\$lum,lamp
10	269.6	268.0	270.3	267.5					0- 10	25.88	25.88	3.21,3.21
20	255.3	254.3	256.8	253.9					10- 20	74.25	100.1	12.4,12.4
30	232.7	232.2	234.6	231.6					20- 30	112.9	213.0	26.4,26.4
40	202.2	202.6	204.9	201.5					30- 40	136.8	349.8	43.4,43.4
50	165.5	166.0	168.4	164.9					40- 50	142.9	492.7	61.1,61.1
60	123.3	124.3	125.6	122.9					50- 60	130.0	622.8	77.3,77.3
70	78.02	79.62	80.47	77.56					60- 70	100.5	723.3	89.7,89.7
80	35.26	36.79	37.50	34.81					70- 80	59.94	783.2	97.2,97.2
90	5.646	6.825	7.347	5.705					80- 90	21.60	804.8	99.9,99.9
100	0	0	0	0					90-100	1.202	806.0	100,100
110	0	0	0	0					100-110	0	806.0	100,100
120	0	0	0	0					110-120	0	806.0	100,100
130	0	0	0	0					120-130	0	806.0	100,100
140	0	0	0	0					130-140	0	806.0	100,100
150	0	0	0	0					140-150	0	806.0	100,100
160	0	0	0	0					150-160	0	806.0	100,100
170	0	0	0	0					160-170	0	806.0	100,100
180	0	0	0	0					170-180	0	806.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

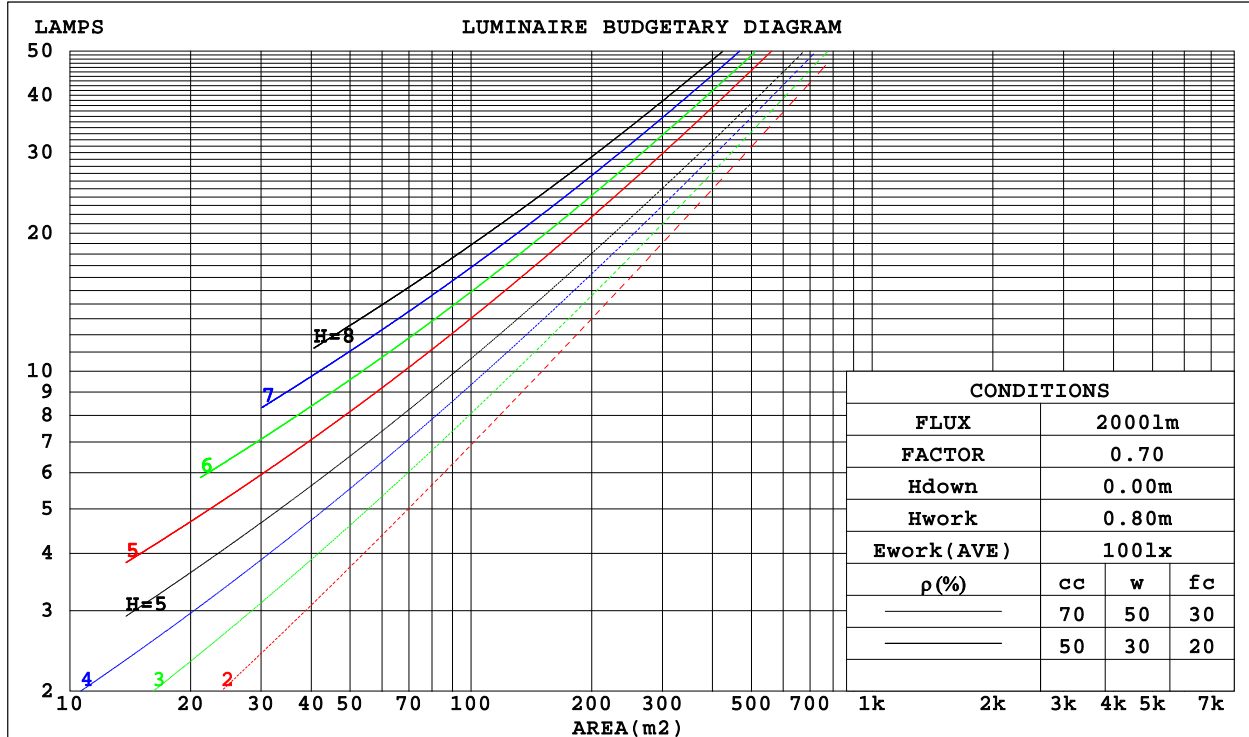
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity:65.0%
 Test Distance:6.710m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:

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	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.87	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.65	.61	.69	.64	.60	.57
4.0	.70	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.50	.44	.39	.37
7.0	.51	.42	.35	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.37	.32	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.36	.30	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity: 65.0%
 Test Distance: 6.710m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	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	.321	.183	.058	.314	.179	.057	.300	.172	.055	.288	.166	.053	.277	.160	.052	
2.0	.298	.164	.050	.292	.161	.050	.280	.156	.048	.269	.151	.047	.259	.147	.046	
3.0	.275	.146	.044	.269	.144	.043	.259	.140	.043	.249	.136	.042	.240	.133	.041	
4.0	.253	.131	.039	.248	.130	.038	.238	.126	.038	.230	.123	.037	.222	.121	.037	
5.0	.233	.119	.034	.229	.117	.034	.220	.115	.034	.213	.112	.033	.206	.110	.033	
6.0	.216	.108	.031	.212	.107	.031	.205	.105	.030	.198	.103	.030	.191	.101	.030	
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.184	.095	.028	.179	.093	.027	
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.173	.087	.025	.167	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.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	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
1.0	.182	.157	.135	.156	.135	.116	.107	.093	.080	.061	.054	.047	.020	.017	.015	
2.0	.174	.133	.098	.149	.115	.085	.102	.079	.059	.059	.046	.035	.019	.015	.011	
3.0	.167	.115	.075	.143	.100	.065	.098	.069	.045	.057	.040	.027	.018	.013	.009	
4.0	.159	.102	.059	.136	.088	.051	.094	.062	.036	.054	.036	.021	.017	.012	.007	
5.0	.151	.092	.048	.130	.079	.042	.090	.056	.029	.052	.033	.017	.017	.011	.006	
6.0	.144	.084	.040	.124	.072	.035	.085	.051	.025	.050	.030	.015	.016	.010	.005	
7.0	.137	.077	.034	.118	.066	.030	.082	.047	.021	.047	.027	.013	.015	.009	.004	
8.0	.131	.071	.030	.113	.061	.026	.078	.043	.018	.045	.025	.011	.015	.008	.004	
9.0	.125	.066	.026	.107	.057	.023	.074	.040	.016	.043	.024	.010	.014	.008	.003	
10.0	.119	.062	.023	.102	.053	.021	.071	.038	.015	.041	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity:65.0%
 Test Distance:6.710m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm										
NAME: CSC3017-LED-15W-3K-WH					TYPE:			WEIGHT:		
DIM.:					SPEC.:			SERIAL No.:		
MFR.: Light By Lotus					SUR.:			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	20.3	21.8	20.5	22.0	22.2	20.3	21.8	20.6	22.0	22.2
3H	21.8	23.2	22.1	23.5	23.7	21.9	23.3	22.2	23.5	23.8
4H	22.5	23.8	22.8	24.1	24.3	22.5	23.9	22.8	24.1	24.4
6H	22.9	24.2	23.3	24.5	24.8	23.0	24.3	23.4	24.6	24.9
8H	23.1	24.4	23.5	24.6	24.9	23.2	24.5	23.6	24.8	25.1
12H	23.3	24.4	23.6	24.7	25.1	23.4	24.6	23.7	24.9	25.2
4H 2H	20.9	22.2	21.2	22.5	22.8	20.9	22.3	21.2	22.5	22.8
3H	22.6	23.8	23.0	24.1	24.4	22.7	23.9	23.0	24.2	24.5
4H	23.4	24.5	23.8	24.8	25.1	23.5	24.6	23.8	24.9	25.2
6H	24.0	25.0	24.4	25.3	25.7	24.1	25.1	24.5	25.4	25.8
8H	24.3	25.2	24.7	25.5	25.9	24.4	25.3	24.8	25.6	26.0
12H	24.5	25.3	24.9	25.7	26.1	24.6	25.4	25.0	25.8	26.2
8H 4H	23.7	24.6	24.1	25.0	25.4	23.8	24.7	24.2	25.0	25.4
6H	24.5	25.2	24.9	25.6	26.1	24.6	25.3	25.0	25.7	26.2
8H	24.8	25.5	25.3	25.9	26.4	24.9	25.6	25.4	26.0	26.5
12H	25.1	25.7	25.6	26.2	26.7	25.3	25.8	25.7	26.3	26.8
12H 4H	23.7	24.5	24.1	24.9	25.3	23.8	24.6	24.2	25.0	25.4
6H	24.6	25.2	25.0	25.7	26.1	24.6	25.3	25.1	25.7	26.2
8H	25.0	25.5	25.4	26.0	26.5	25.1	25.6	25.5	26.1	26.6
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	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 806.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -0.7)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity:65.0%
 Test Distance:6.710m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:

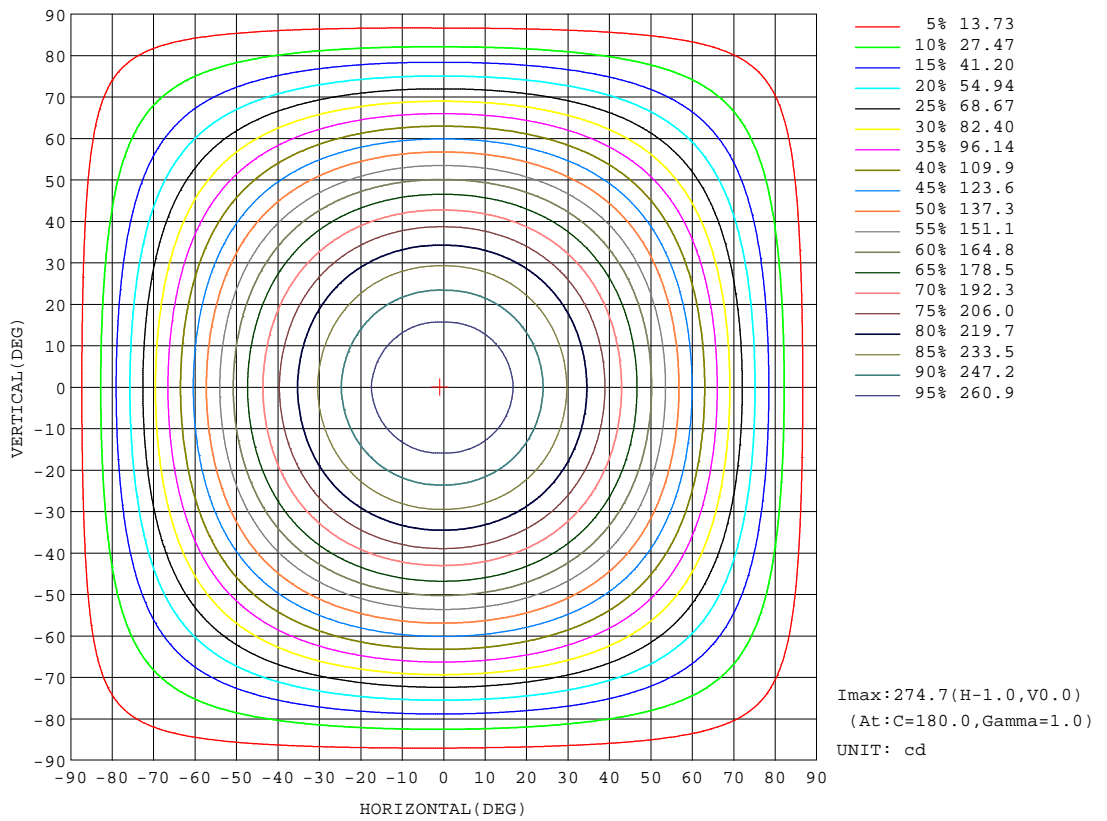
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	56	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	83	75	68	61
2.00	94	85	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	97	101	97	94	85
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:DAMIN
 Test Date:2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity:65.0%
 Test Distance:6.710m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:



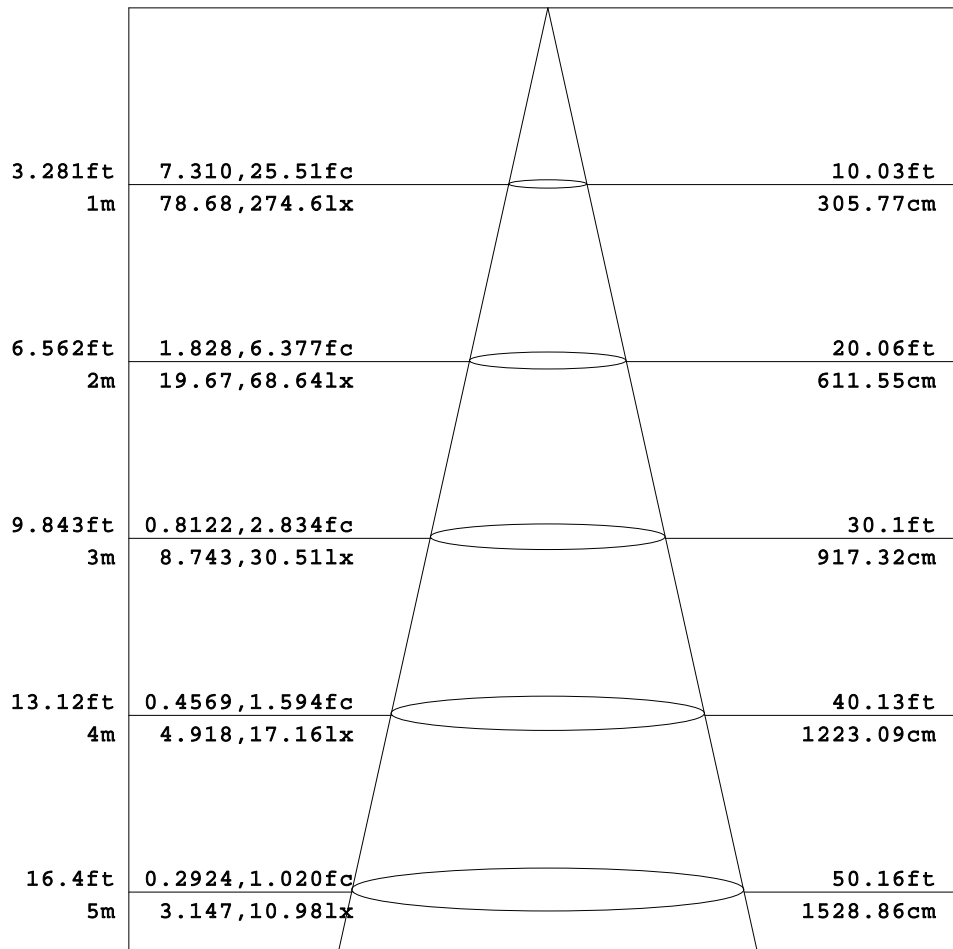
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity:65.0%
 Test Distance:6.710m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:

Flux out:586.1 lm



Height Eavg, Emax Angle: 113.62deg Diameter

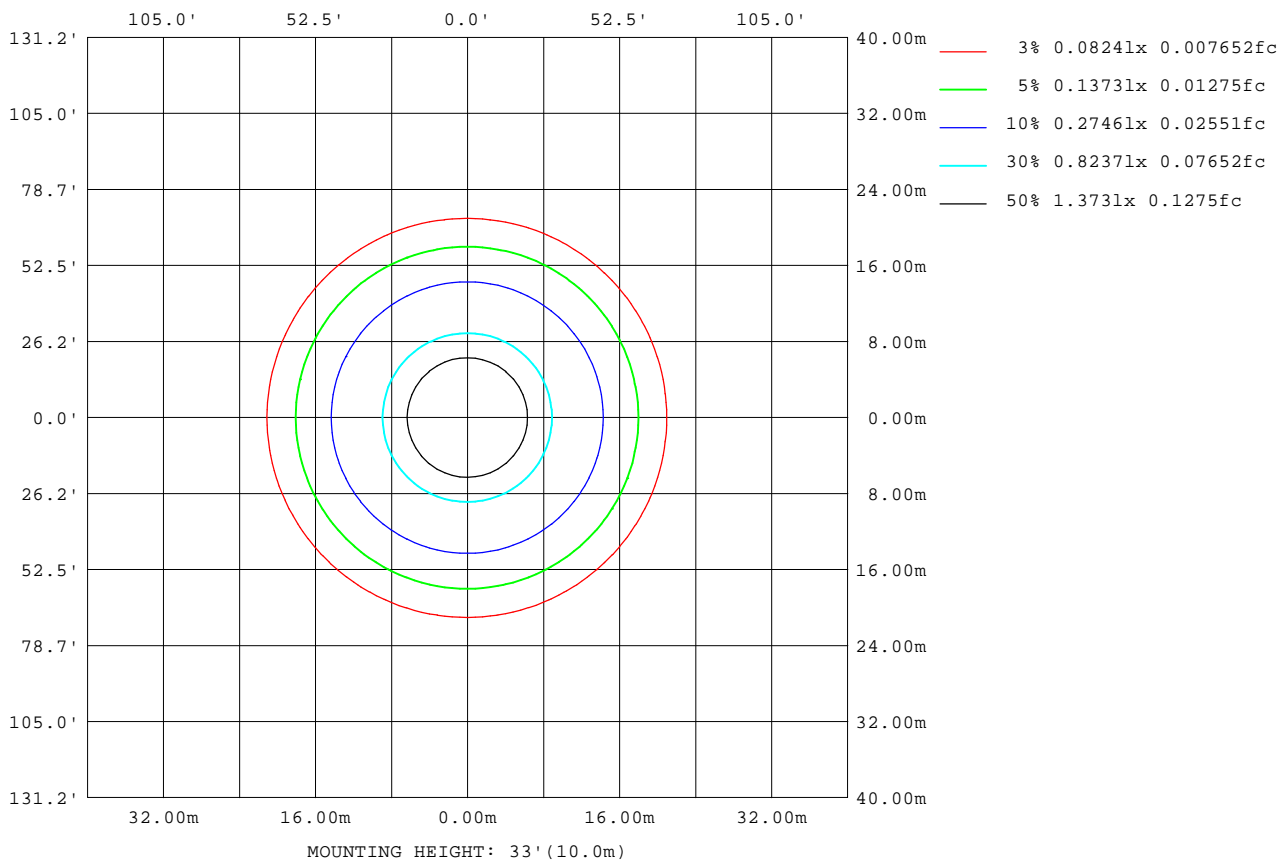
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2019-11-06

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.274
Humidity: 65.0%
Test Distance: 6.710m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

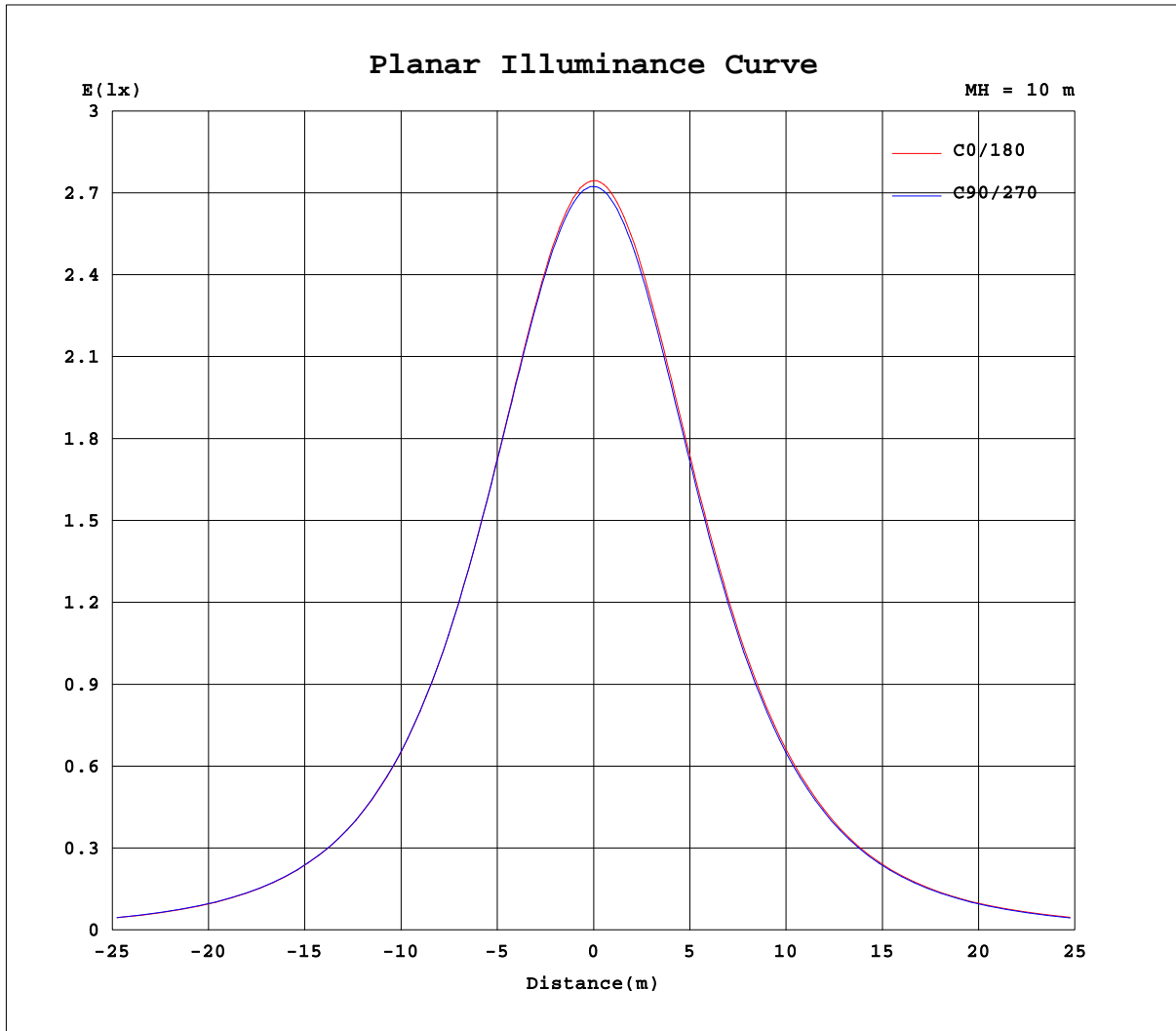
Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity: 65.0%
 Test Distance: 6.710m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity: 65.0%
 Test Distance: 6.710m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.1269A P:14.47W PF:0.9492 Lamp Flux:806.008x1 lm		
NAME: CSC3017-LED-15W-3K-WH	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Light By Lotus	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	275	272	275	272															
5	273	271	274	271															
10	270	268	270	268															
15	264	262	265	262															
20	255	254	257	254															
25	245	244	247	244															
30	233	232	235	232															
35	218	218	221	217															
40	202	203	205	201															
45	185	185	187	184															
50	165	166	168	165															
55	145	146	147	144															
60	123	124	126	123															
65	101	102	103	100															
70	78.0	79.6	80.5	77.6															
75	55.5	57.3	58.1	54.9															
80	35.3	36.8	37.5	34.8															
85	18.4	19.6	20.3	18.1															
90	5.65	6.82	7.35	5.70															
95	0.00	0.00	0.00	0.00															
100	0.00	0.00	0.00	0.00															
105	0.00	0.00	0.00	0.00															
110	0.00	0.00	0.00	0.00															
115	0.00	0.00	0.00	0.00															
120	0.00	0.00	0.00	0.00															
125	0.00	0.00	0.00	0.00															
130	0.00	0.00	0.00	0.00															
135	0.00	0.00	0.00	0.00															
140	0.00	0.00	0.00	0.00															
145	0.00	0.00	0.00	0.00															
150	0.00	0.00	0.00	0.00															
155	0.00	0.00	0.00	0.00															
160	0.00	0.00	0.00	0.00															
165	0.00	0.00	0.00	0.00															
170	0.00	0.00	0.00	0.00															
175	0.00	0.00	0.00	0.00															
180	0.00	0.00	0.00	0.00															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-11-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.274
 Humidity:65.0%
 Test Distance:6.710m [K=1.0000]
 Remarks: