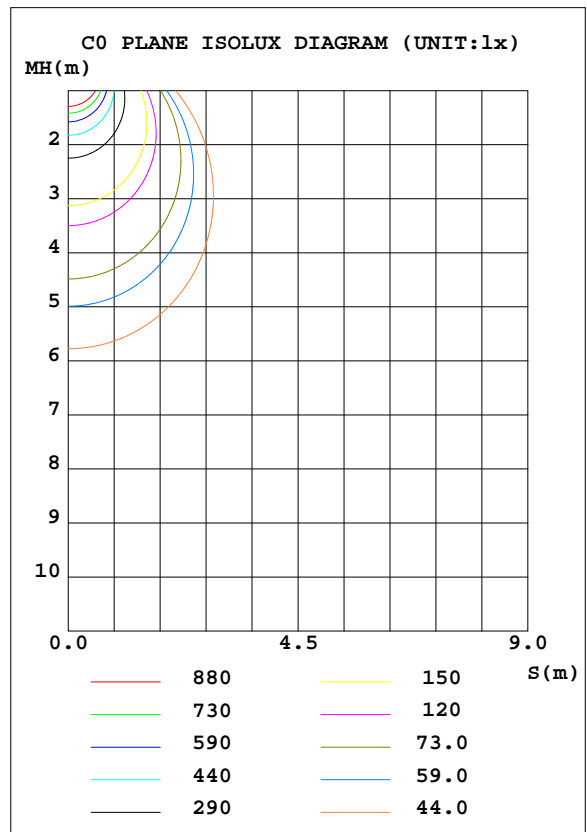
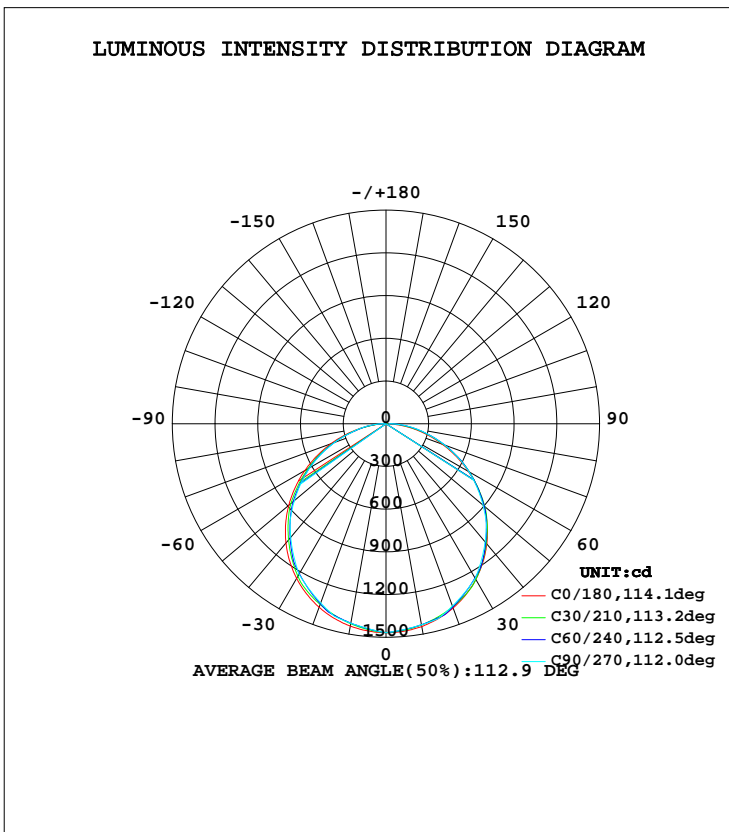


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.1lx1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.36 lm/W			
MODEL	3600412	Imax(cd)	1468	S/MH(C0/180)	1.28
NOMINAL POWER(W)	42	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	4248.1	$\eta$ UP, DN(C0-180)	0.0, 51.1
NOMINAL FLUX(lm)	4248.11	CIE CLASS	DIRECT	$\eta$ UP, DN(C180-360)	0.0, 48.9
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	240.1	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	1462	1453	1451	1452	1461	1448	1445	1449	0- 5	34.85	34.85	0.82,0.82
10	1446	1433	1434	1431	1443	1423	1422	1425	5- 10	103.1	137.9	3.25,3.25
15	1417	1408	1417	1404	1413	1392	1399	1395	10- 15	168.1	306.0	7.2,7.2
20	1378	1377	1363	1372	1372	1356	1340	1361	15- 20	227.9	533.9	12.6,12.6
25	1326	1319	1308	1312	1319	1292	1280	1298	20- 25	279.4	813.2	19.1,19.1
30	1262	1251	1254	1244	1255	1221	1221	1227	25- 30	322.0	1135	26.7,26.7
35	1187	1180	1168	1173	1179	1146	1131	1152	30- 35	354.2	1489	35.1,35.1
40	1101	1102	1083	1094	1093	1063	1041	1070	35- 40	373.7	1863	43.9,43.9
45	1005	1001	997.7	992.6	996.8	959.6	951.0	966.7	40- 45	381.1	2244	52.8,52.8
50	899.7	899.4	889.4	890.1	891.4	854.5	839.9	862.1	45- 50	376.1	2620	61.7,61.7
55	786.4	796.7	781.1	786.7	777.6	748.6	728.7	756.5	50- 55	357.6	2978	70.1,70.1
60	667.7	675.8	672.8	666.5	658.1	626.7	617.5	634.4	55- 60	327.8	3306	77.8,77.8
65	544.4	557.4	555.7	548.1	535.3	506.8	500.0	514.4	60- 65	287.8	3593	84.6,84.6
70	420.9	439.5	438.5	430.0	412.6	388.6	382.5	395.9	65- 70	239.2	3833	90.2,90.2
75	299.8	322.0	321.4	312.1	291.4	272.1	264.9	279.1	70- 75	184.8	4017	94.6,94.6
80	186.0	209.7	221.6	199.7	179.4	163.1	177.6	169.2	75- 80	128.6	4146	97.6,97.6
85	77.74	111.7	121.8	103.2	70.18	82.50	90.23	85.55	80- 85	75.69	4222	99.4,99.4
90	3.303	14.86	22.03	7.831	3.166	2.950	2.884	2.807	85- 90	26.44	4248	100,100
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			

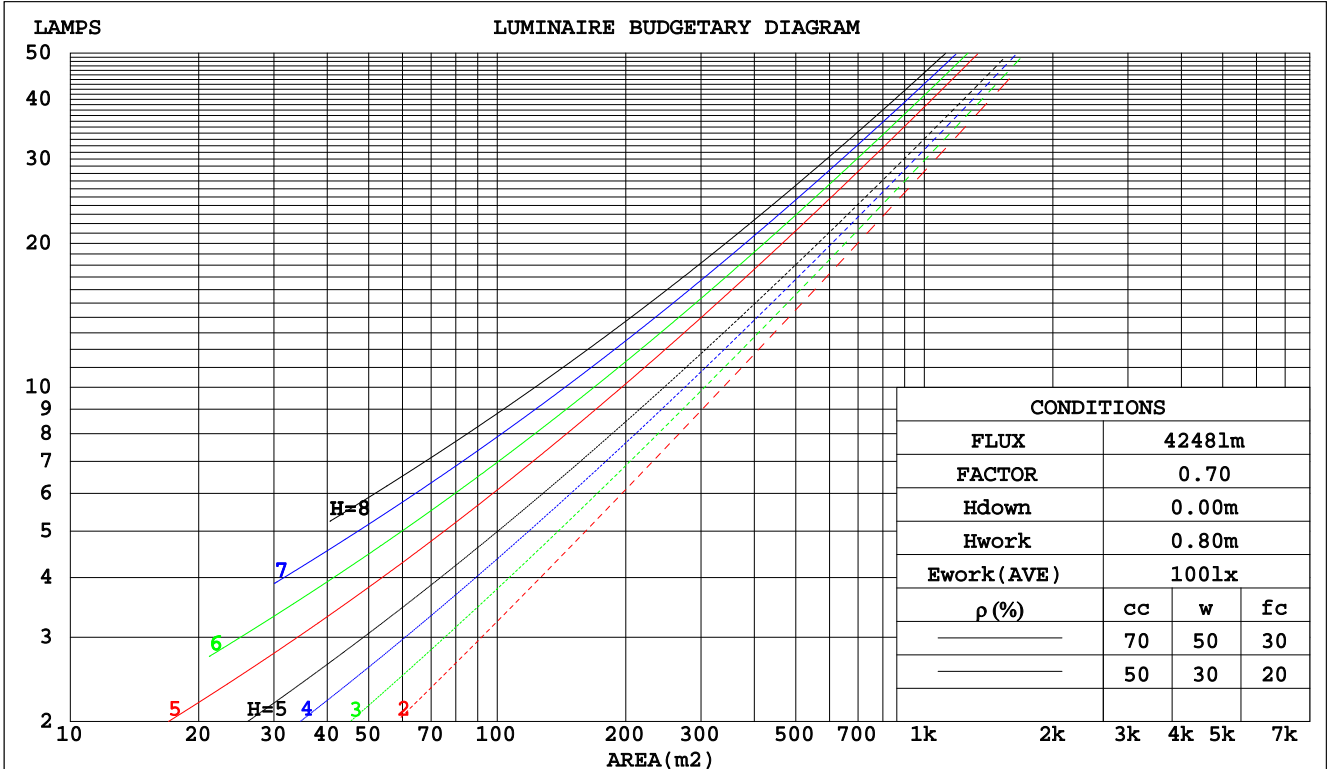
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.1lx1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc																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	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.81	.77	.73	.78	.74	.71	.69
3.0	.79	.71	.64	.77	.70	.63	.74	.68	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.53	.64	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.53	.46	.59	.51	.46	.57	.50	.45	.55	.49	.45	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.47	.40	.35	.46	.39	.35	.33
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.42	.34	.29	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.24



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.11x1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:

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	.317	.181	.057	.310	.177	.056	.297	.170	.054	.285	.164	.053	.274	.159	.051	
2.0	.296	.162	.050	.290	.160	.049	.278	.155	.048	.268	.150	.047	.258	.146	.046	
3.0	.273	.145	.044	.268	.143	.043	.257	.139	.042	.248	.136	.042	.239	.132	.041	
4.0	.252	.131	.038	.247	.129	.038	.238	.126	.038	.229	.123	.037	.221	.120	.037	
5.0	.232	.118	.034	.228	.117	.034	.220	.114	.034	.212	.112	.033	.205	.110	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.105	.030	.197	.102	.030	.191	.100	.030	
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.093	.027	
8.0	.187	.091	.026	.184	.090	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.156	.134	.155	.134	.115	.106	.092	.080	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.101	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.1lx1 lm										
NAME: 3600412 - 6060 LED Panel Colortech					TYPE:42W			WEIGHT:		
DIM.:					SPEC.:4000K			SERIAL No.:1		
MFR.:					SUR.:0.545X0.545			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	18.3	19.8	18.6	20.0	20.2	18.3	19.8	18.6	20.0	20.2
3H	19.8	21.3	20.1	21.5	21.7	19.9	21.3	20.2	21.6	21.8
4H	20.5	21.8	20.8	22.1	22.4	20.6	22.0	20.9	22.2	22.5
6H	21.0	22.2	21.3	22.5	22.8	21.2	22.5	21.6	22.8	23.1
8H	21.1	22.3	21.4	22.6	22.9	21.5	22.7	21.8	23.0	23.3
12H	21.1	22.3	21.5	22.6	22.9	21.7	22.9	22.0	23.2	23.5
4H 2H	18.9	20.3	19.2	20.5	20.8	18.9	20.3	19.2	20.5	20.8
3H	20.7	21.9	21.0	22.2	22.5	20.8	22.0	21.1	22.3	22.6
4H	21.5	22.6	21.9	22.9	23.2	21.6	22.7	22.0	23.0	23.4
6H	22.1	23.0	22.5	23.4	23.8	22.4	23.3	22.8	23.7	24.0
8H	22.3	23.2	22.7	23.5	23.9	22.7	23.6	23.1	24.0	24.3
12H	22.4	23.2	22.8	23.6	24.0	23.0	23.8	23.4	24.2	24.6
8H 4H	21.8	22.7	22.2	23.1	23.5	21.9	22.8	22.3	23.2	23.6
6H	22.6	23.3	23.0	23.8	24.2	22.9	23.6	23.3	24.0	24.4
8H	22.9	23.6	23.4	24.0	24.4	23.3	24.0	23.8	24.4	24.8
12H	23.1	23.7	23.6	24.1	24.6	23.7	24.3	24.2	24.7	25.2
12H 4H	21.8	22.7	22.3	23.1	23.5	21.9	22.8	22.4	23.2	23.6
6H	22.7	23.4	23.2	23.8	24.2	22.9	23.6	23.4	24.0	24.5
8H	23.0	23.6	23.5	24.1	24.5	23.4	24.0	23.9	24.5	24.9
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 4248 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.0)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.11x1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:

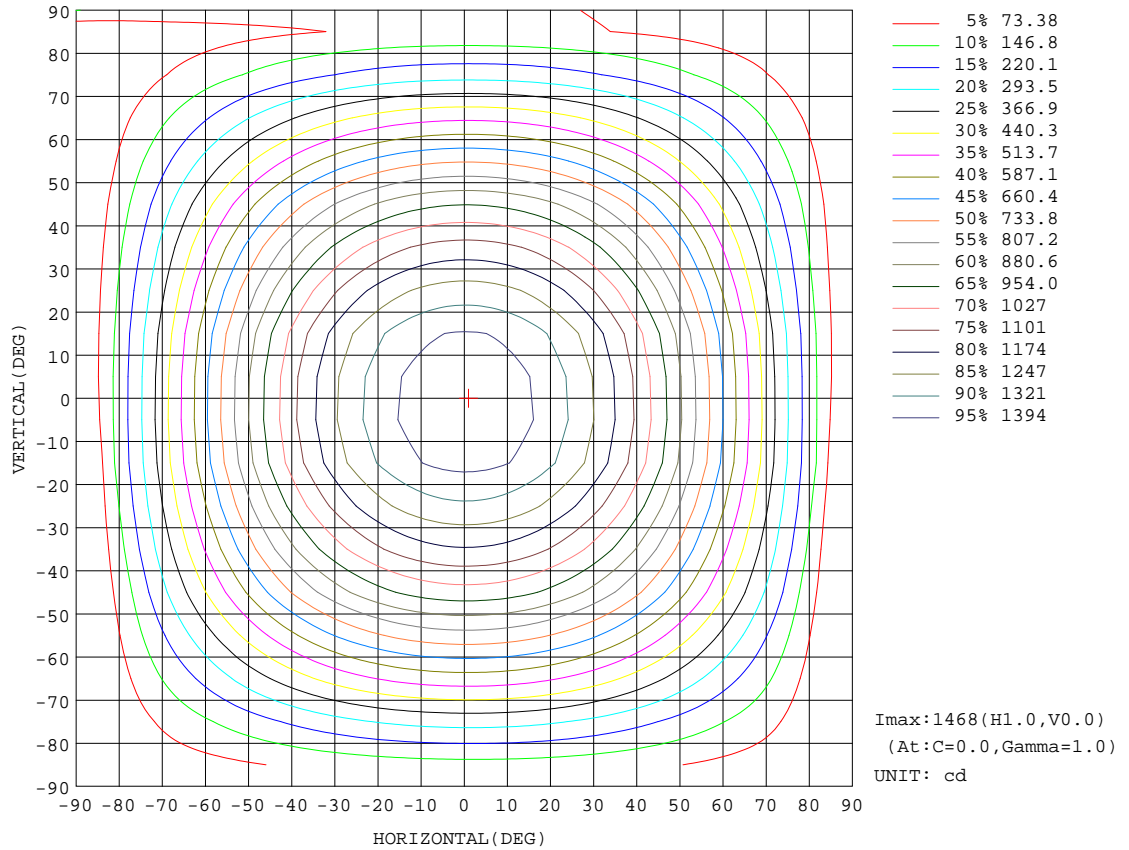
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	32
0.80	67	55	48	66	55	48	64	54	47	40
1.00	76	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	64	78	70	64	56
1.50	88	78	70	86	77	70	83	75	69	61
2.00	95	86	79	93	85	78	89	82	77	69
2.50	98	91	84	96	89	83	93	86	82	73
3.00	102	95	89	100	93	88	96	90	86	77
4.00	106	100	95	104	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	95	85
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:DAMIN  
 Test Date:2019-06-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.11x1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:

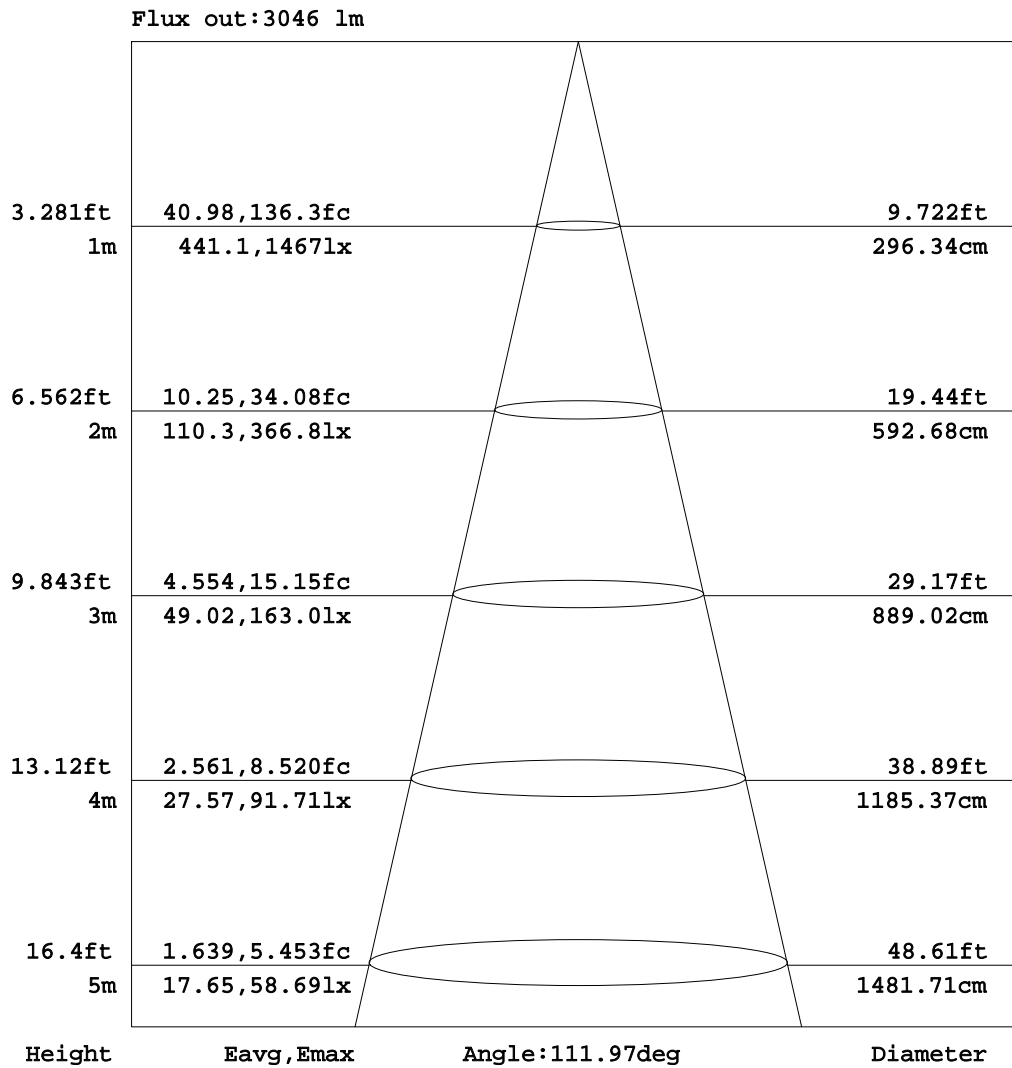


C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.1lx1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:



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

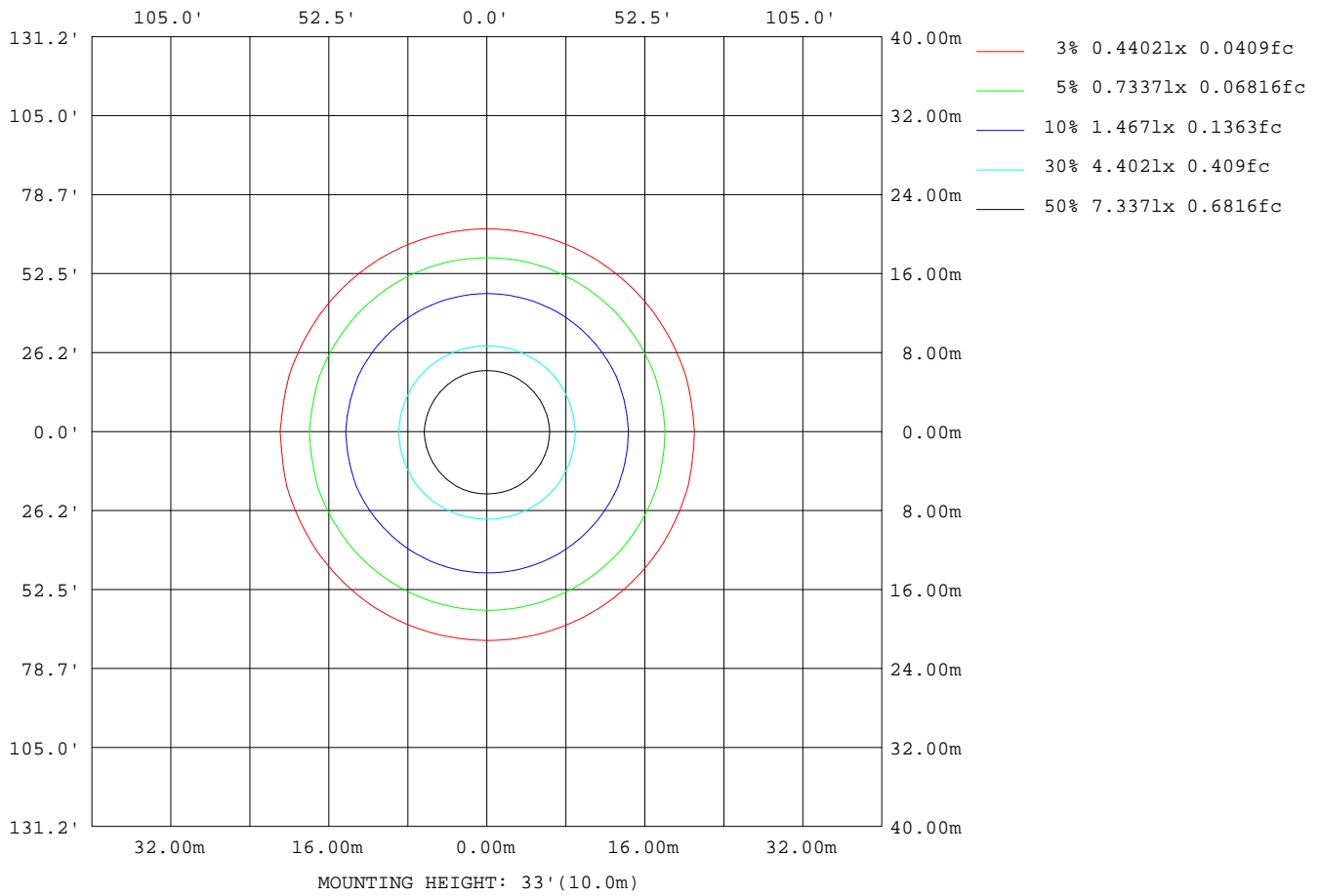
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

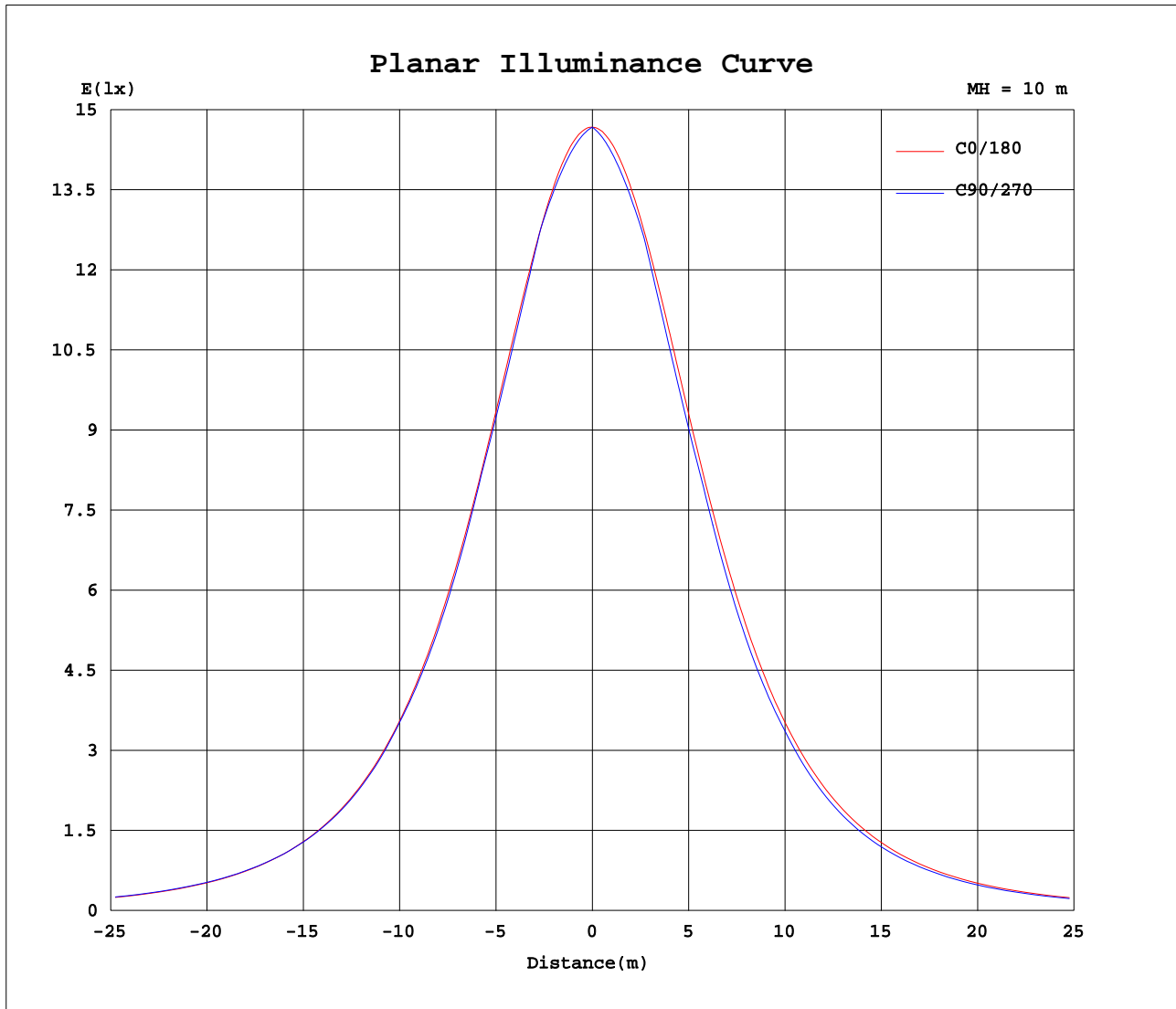
Test:U:240.1V I:0.1790A P:41.10W PF:0.9560 Lamp Flux:4248.11x1 lm		
NAME: 3600412 - 6060 LED Panel Colortech	TYPE:42W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.545X0.545	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-13

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-06-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity: 65.0%  
 Test Distance: 9.443m [K=1.0000]  
 Remarks:







