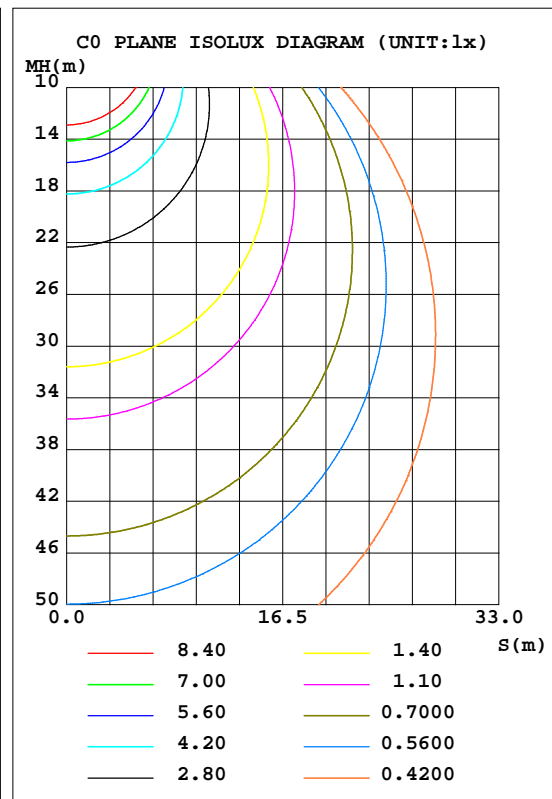
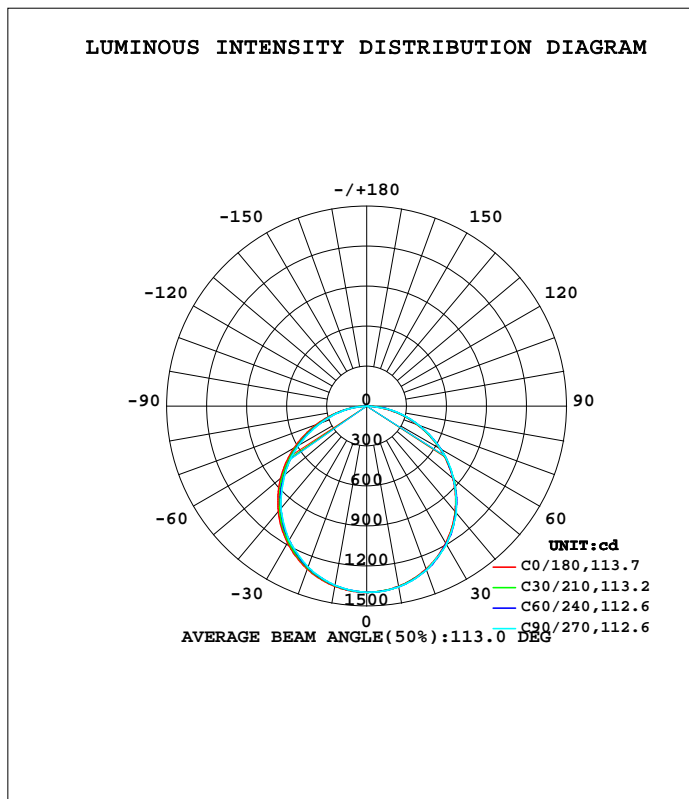


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.61 lm/W			
MODEL	795542	I <sub>max</sub> (cd)	1397	S/MH(C0/180)	1.26
NOMINAL POWER(W)	48	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	4013.1	η UP, DN(C0-180)	0.0,49.0
NOMINAL FLUX(lm)	4013.09	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	219.5	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [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	1391	1388	1387	1388	1391	1392	1393	1392	0- 5	33.31	33.31	0.83,0.83
10	1373	1367	1366	1367	1374	1376	1378	1376	5- 10	98.79	132.1	3.29,3.29
15	1343	1335	1331	1335	1344	1348	1349	1348	10- 15	160.9	293.0	7.3,7.3
20	1302	1290	1287	1291	1302	1308	1311	1307	15- 20	217.6	510.6	12.7,12.7
25	1249	1235	1226	1236	1250	1257	1255	1256	20- 25	266.8	777.5	19.4,19.4
30	1187	1168	1164	1168	1187	1193	1198	1192	25- 30	307.0	1084	27,27
35	1114	1092	1083	1092	1115	1120	1122	1119	30- 35	337.2	1422	35.4,35.4
40	1032	1011	1002	1012	1033	1043	1046	1041	35- 40	355.9	1778	44.3,44.3
45	941.4	915.7	902.5	916.5	942.8	950.0	948.3	947.8	40- 45	362.9	2140	53.3,53.3
50	843.7	819.9	802.9	820.2	845.1	856.0	851.0	854.2	45- 50	357.2	2498	62.2,62.2
55	738.5	708.3	701.9	709.5	740.8	746.1	752.0	743.4	50- 55	340.1	2838	70.7,70.7
60	627.8	598.5	589.0	600.3	630.8	637.1	639.8	633.8	55- 60	312.2	3150	78.5,78.5
65	512.7	488.2	474.7	490.4	516.2	527.2	525.9	523.1	60- 65	273.8	3424	85.3,85.3
70	396.4	373.0	360.4	375.2	400.6	410.4	412.0	406.5	65- 70	227.0	3651	91,91
75	282.5	260.9	256.0	262.9	287.0	296.6	304.1	293.0	70- 75	175.2	3826	95.3,95.3
80	162.7	159.9	151.6	161.6	168.4	192.6	196.2	188.4	75- 80	121.1	3947	98.4,98.4
85	44.24	39.39	0	40.22	50.07	55.32	0	52.75	80- 85	60.26	4007	99.9,99.9
90	0.9390	0	0	0	1.780	0	0	0	85- 90	5.676	4013	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		

Conical surface Flux(90deg): 2140.4 lm

%lum = 53.3%  
%lamp = 53.3%

Conical surface Flux(120deg): 3150 lm

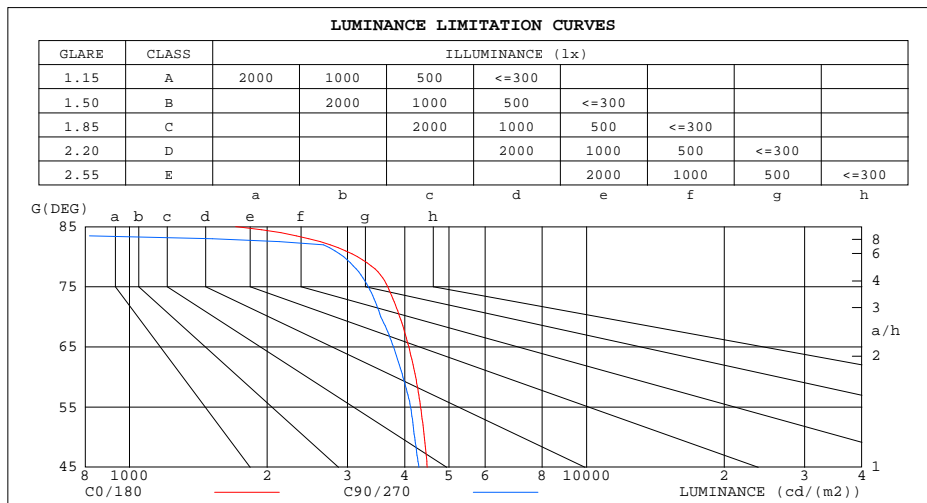
%lum = 78.5%  
%lamp = 78.5%

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Neiko  
Test Date:2015-11-09

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
Humidity:65.0%  
Test Distance:12.123m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1709	0
80	3154	2940
75	3675	3331
70	3902	3548
65	4084	3782
60	4228	3967
55	4335	4120
50	4419	4206
45	4482	4297

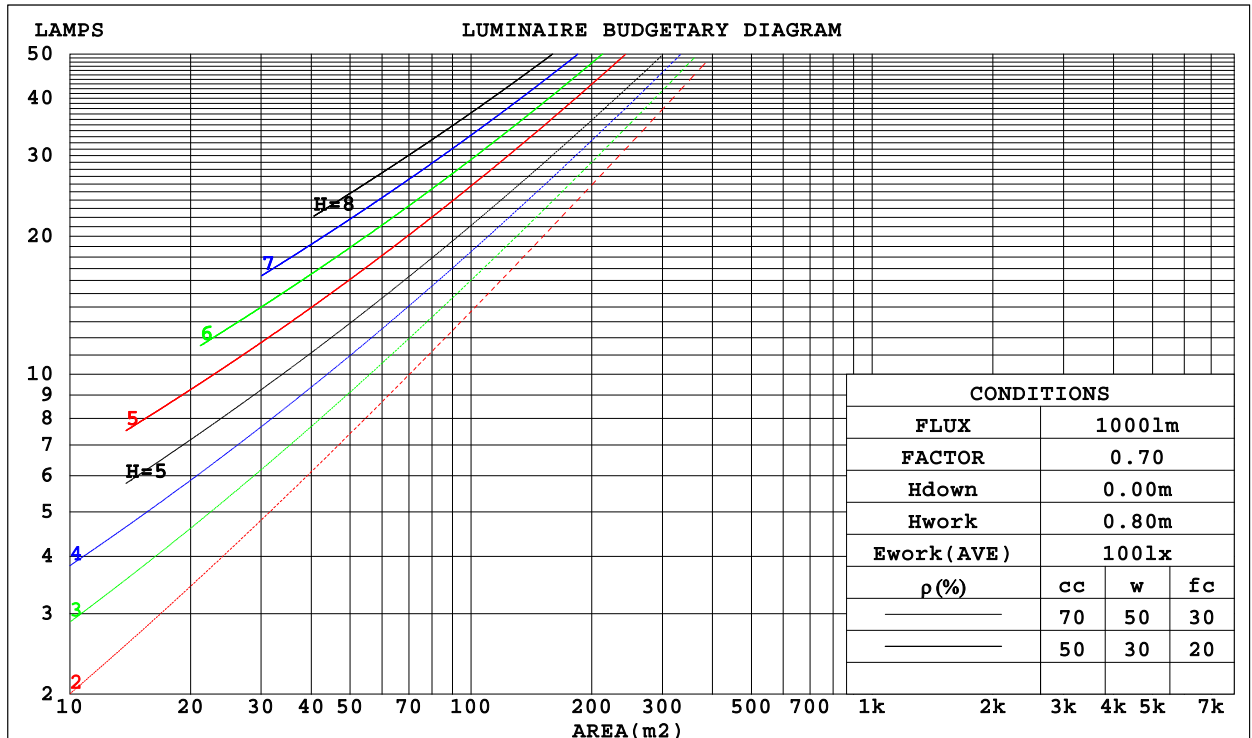
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.84
2.0	.90	.83	.78	.88	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.69
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.58	.53	.62	.56	.52	.50
5.0	.63	.53	.47	.61	.53	.47	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.32	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	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	.310	.176	.056	.303	.173	.055	.289	.166	.053	.277	.160	.051	.266	.154	.050	
2.0	.293	.160	.049	.286	.158	.049	.275	.153	.047	.264	.148	.046	.254	.144	.045	
3.0	.271	.144	.043	.265	.142	.043	.255	.138	.042	.245	.134	.041	.237	.131	.041	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033	
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.174	.084	.024	.172	.084	.023	.166	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.161	.078	.022	.157	.077	.022	.152	.076	.022	.148	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.134	.154	.134	.116	.106	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.128	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.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	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm											
NAME:		TYPE:LED				WEIGHT:					
SPEC.:		DIM.: 300*1200				SERIAL No.:BLD20151109P16					
MFR.:		SUR.:0.245*1.15				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	17.9	19.4	18.2	19.6	19.8	17.7	19.2	17.9	19.4	19.6
	3H	19.5	20.9	19.8	21.1	21.4	19.1	20.5	19.4	20.8	21.0
	4H	20.1	21.4	20.4	21.7	21.9	19.7	21.1	20.0	21.3	21.6
	6H	20.5	21.8	20.9	22.1	22.3	20.1	21.4	20.5	21.7	22.0
	8H	20.6	21.8	21.0	22.1	22.4	20.3	21.5	20.6	21.8	22.1
	12H	20.7	21.8	21.0	22.1	22.4	20.2	21.4	20.6	21.7	22.0
4H	2H	18.5	19.8	18.8	20.1	20.3	18.3	19.6	18.6	19.9	20.1
	3H	20.2	21.4	20.6	21.7	22.0	19.9	21.1	20.3	21.4	21.7
	4H	21.0	22.1	21.4	22.4	22.7	20.7	21.7	21.0	22.1	22.4
	6H	21.5	22.5	21.9	22.8	23.2	21.2	22.2	21.6	22.5	22.9
	8H	21.7	22.6	22.1	23.0	23.3	21.4	22.2	21.8	22.6	23.0
	12H	21.8	22.6	22.2	23.0	23.4	21.3	22.1	21.8	22.5	22.9
8H	4H	21.2	22.1	21.6	22.5	22.9	20.9	21.8	21.4	22.2	22.6
	6H	21.9	22.7	22.4	23.1	23.5	21.6	22.4	22.1	22.8	23.2
	8H	22.2	22.8	22.7	23.3	23.7	21.9	22.5	22.3	22.9	23.4
	12H	22.3	22.9	22.8	23.4	23.8	21.8	22.4	22.3	22.9	23.3
12H	4H	21.2	22.0	21.7	22.4	22.8	21.0	21.8	21.4	22.2	22.6
	6H	22.0	22.6	22.5	23.1	23.5	21.7	22.4	22.2	22.8	23.2
	8H	22.3	22.9	22.8	23.3	23.8	22.0	22.5	22.4	23.0	23.4
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2				+ 0.2 / - 0.2					
1.5H		+ 0.1 / - 0.3				+ 0.1 / - 0.3					
2.0H		+ 0.2 / - 0.3				+ 0.2 / - 0.3					

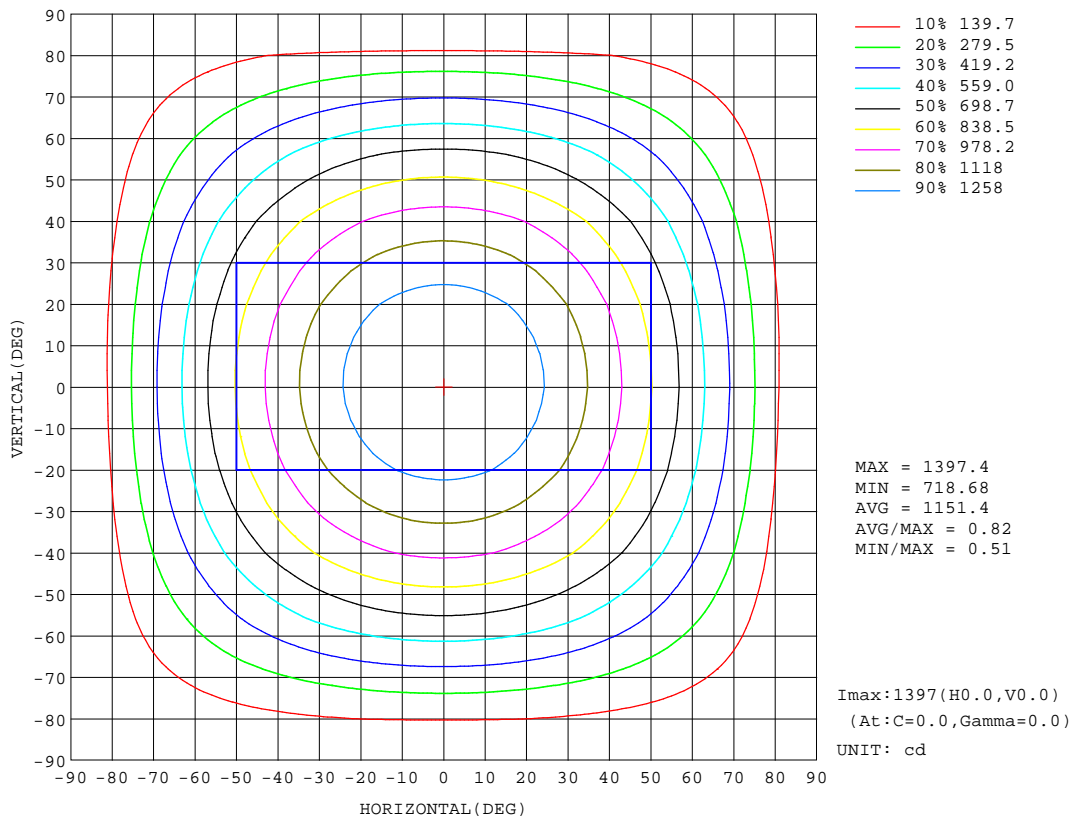
CIE Pub.117 Corrected 4013 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.8)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Neiko  
Test Date:2015-11-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
Humidity:65.0%  
Test Distance:12.123m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	Shielding Angle:



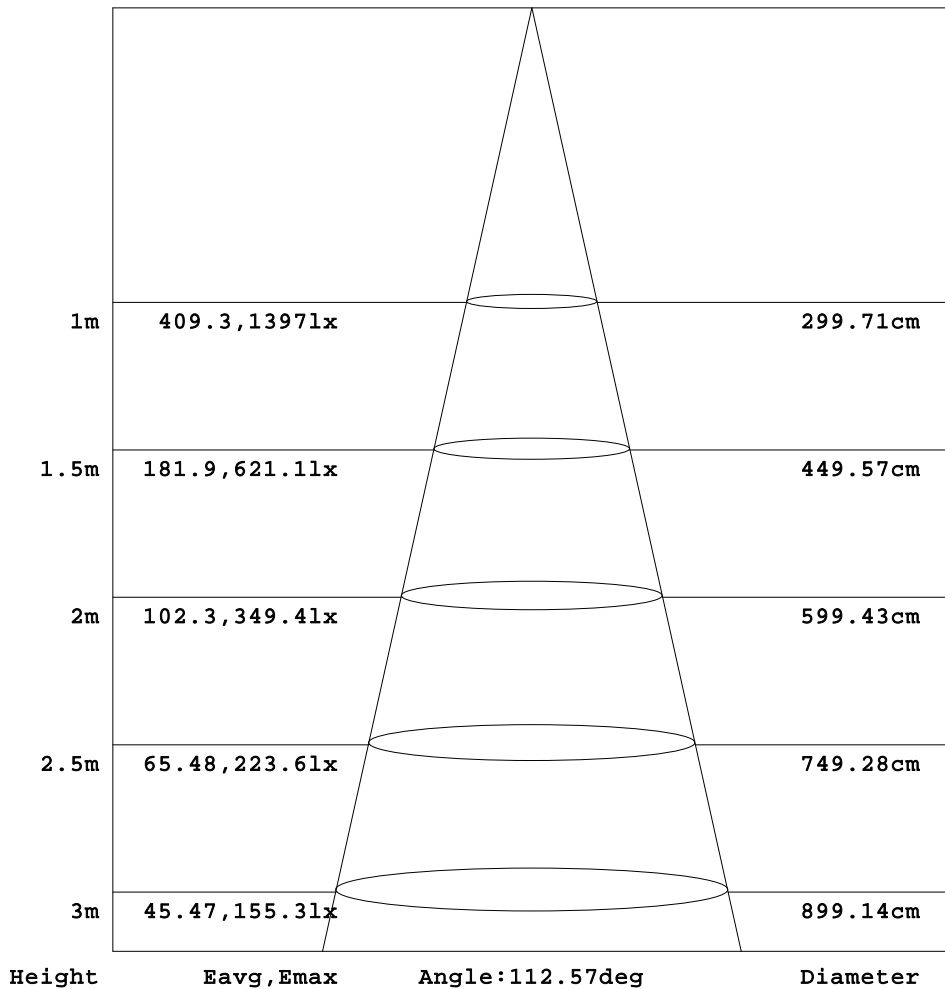
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109F16
MFR.:	SUR.:0.245*1.15	Shielding Angle:

Flux out:2935 lm



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

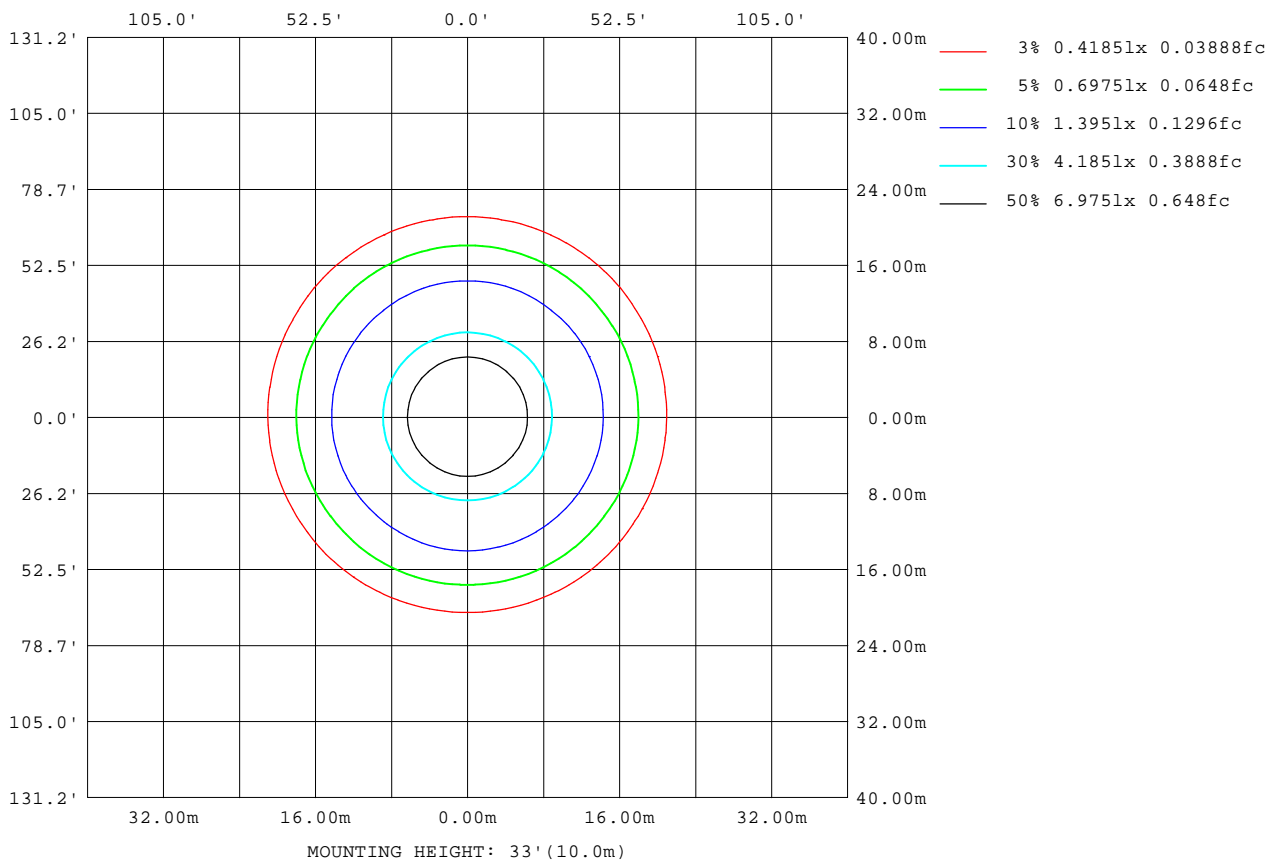
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Neiko  
 Test Date: 2015-11-09

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity: 65.0%  
 Test Distance: 12.123m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:230.1V I:0.2195A P:46.88W PF:0.9280 Lamp Flux:4013.09x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 300*1200	SERIAL No.:BLD20151109P16
MFR.:	SUR.:0.245*1.15	Shielding Angle:

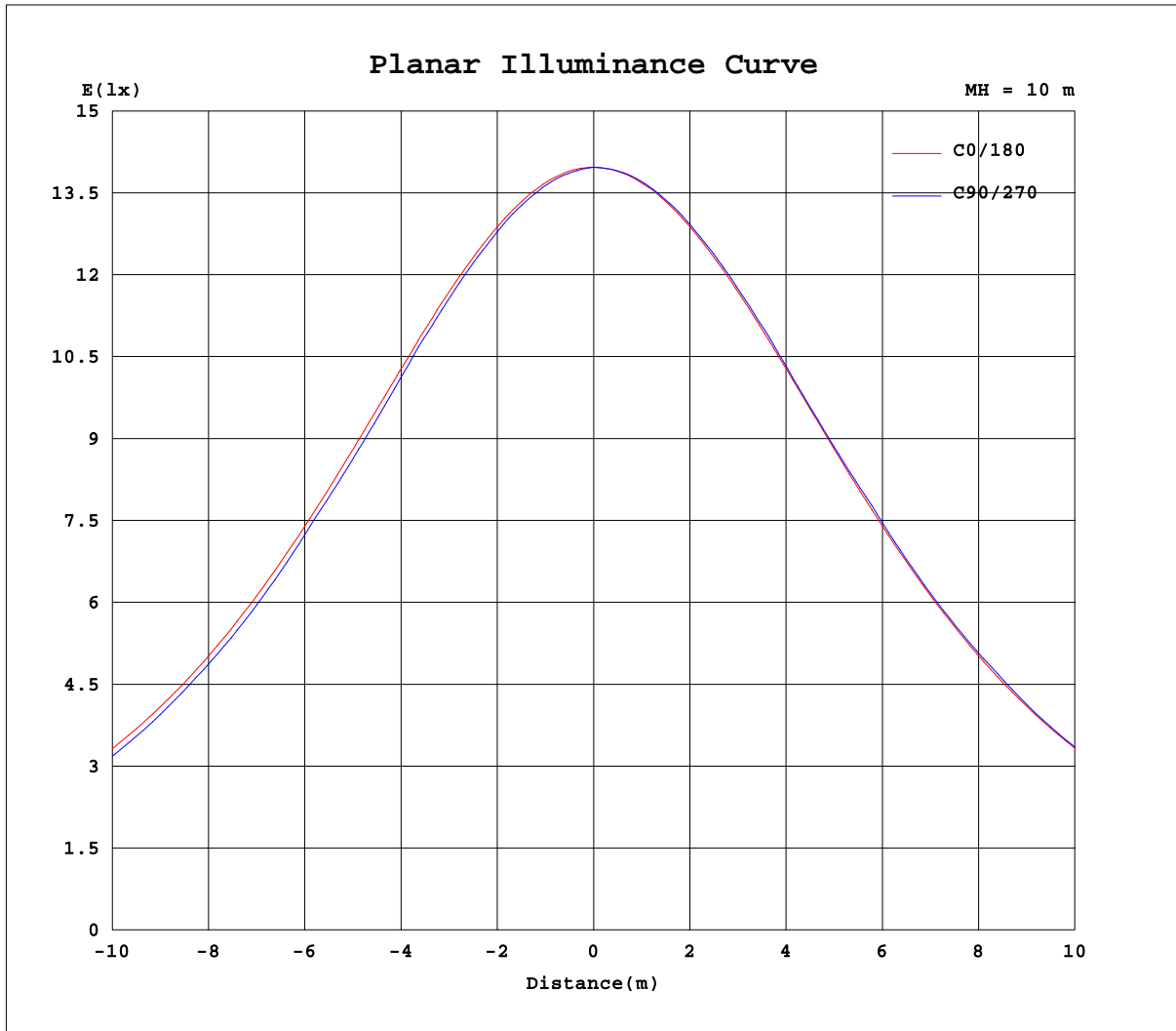
AvgL	cd/m2
L_0~180(65)av	4099
L_0~180(75)av	3705
L_0~180(85)av	1822
L_90~270(65)av	3986
L_90~270(75)av	3644
L_90~270(85)av	0
L_45(65)av	4041
L_45(75)av	3621
L_45(85)av	1813

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Neiko  
 Test Date:2015-11-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity:65.0%  
 Test Distance:12.123m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Neiko  
 Test Date: 2015-11-09

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.350  
 Humidity: 65.0%  
 Test Distance: 12.123m [K=1.0000]  
 Remarks:







