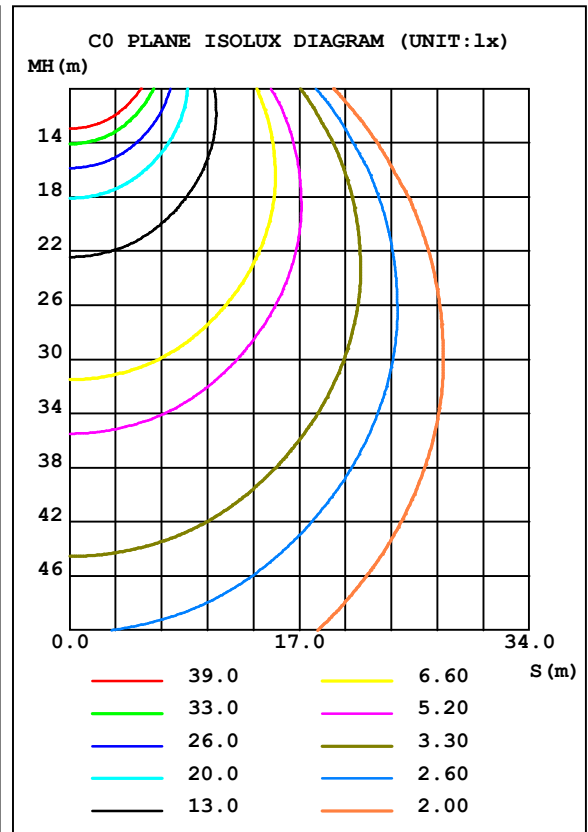
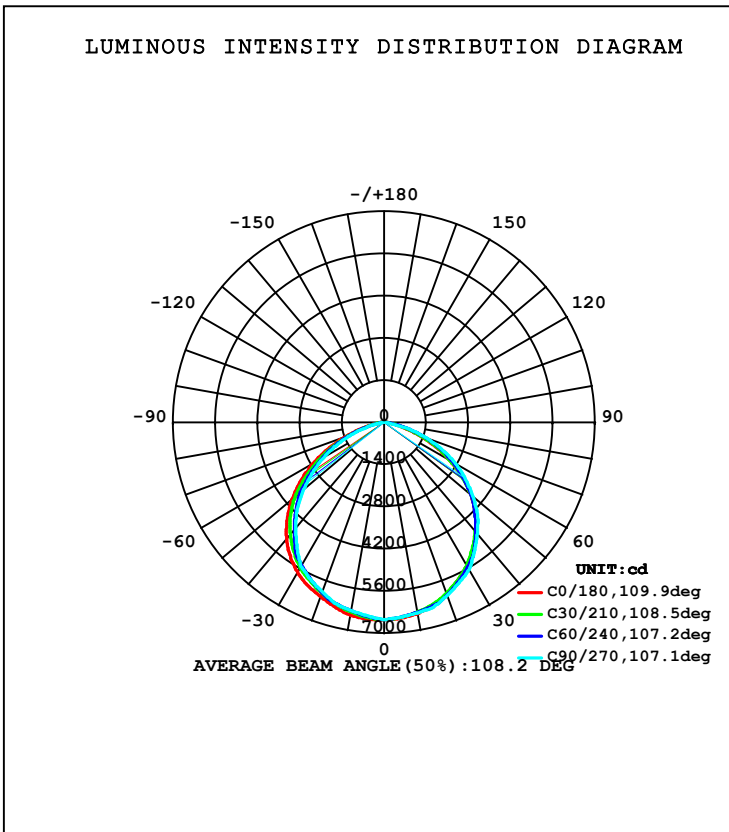


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.82 lm/W			
MODEL	6500k	I _{max} (cd)	6563	S/MH (C0/180)	1.25
NOMINAL POWER (W)	188	LOR (%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	17040	η UP, DN (C0-180)	0.0, 51.4
NOMINAL FLUX (lm)	17040.3	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 48.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.5	η down (%)	100.0	CIBSE SHR MAX	1.35



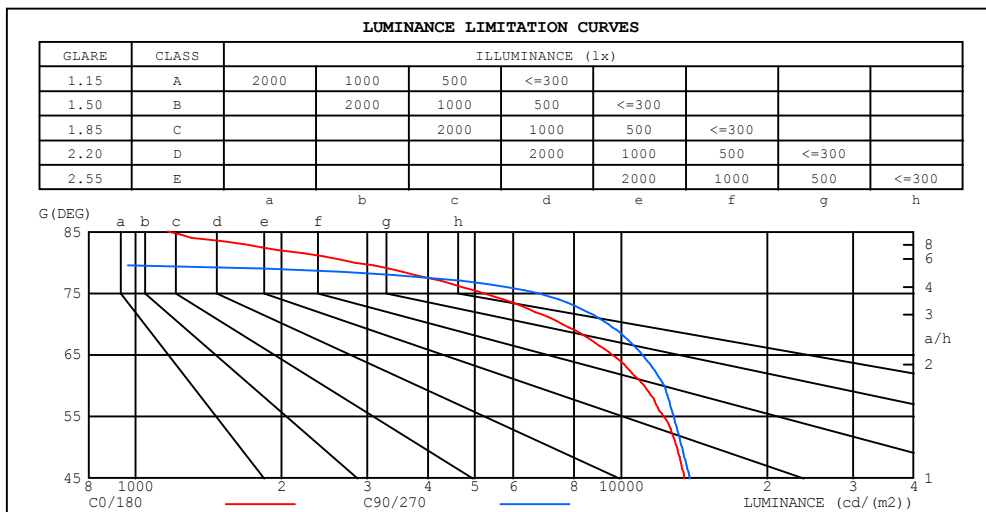
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 18.625m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	6523	6488	6485	6513	6554	6478	6445	6458	0- 5	155.7	155.7	0.91,0.91
10	6444	6393	6420	6432	6492	6368	6339	6332	5- 10	460.8	616.5	3.62,3.62
15	6284	6273	6354	6318	6342	6224	6232	6179	10- 15	750.9	1367	8.02,8.02
20	6053	6122	6120	6177	6160	6053	5996	5994	15- 20	1016	2384	14,14
25	5788	5821	5886	5903	5986	5781	5760	5705	20- 25	1245	3629	21.3,21.3
30	5498	5475	5652	5615	5753	5483	5523	5367	25- 30	1437	5065	29.7,29.7
35	5164	5120	5237	5323	5436	5188	5047	5028	30- 35	1581	6646	39,39
40	4777	4756	4822	4974	5043	4826	4570	4652	35- 40	1661	8307	48.7,48.7
45	4294	4262	4407	4485	4555	4280	4093	4109	40- 45	1678	9985	58.6,58.6
50	3771	3744	3858	3963	3991	3722	3494	3545	45- 50	1627	11612	68.1,68.1
55	3159	3214	3309	3421	3379	3127	2894	2969	50- 55	1504	13116	77,77
60	2510	2583	2760	2757	2723	2442	2294	2314	55- 60	1316	14432	84.7,84.7
65	1827	1956	2104	2102	2000	1775	1665	1663	60- 65	1073	15505	91,91
70	1166	1357	1448	1468	1311	1142	1035	1073	65- 70	789.1	16294	95.6,95.6
75	609.7	784.4	791.5	866.9	695.1	614.5	405.1	575.3	70- 75	492.7	16787	98.5,98.5
80	221.0	257.8	0	301.7	257.3	147.4	0	139.2	75- 80	215.0	17002	99.8,99.8
85	45.62	0	0	0	53.57	0	0	0	80- 85	36.31	17038	100,100
90	0.3676	0	0	0	0.3167	0	0	0	85- 90	1.964	17040	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		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1163	0
80	2828	0
75	5235	6796
70	7576	9406
65	9605	11062
60	11155	12266
55	12237	12820
50	13037	13337
45	13494	13849

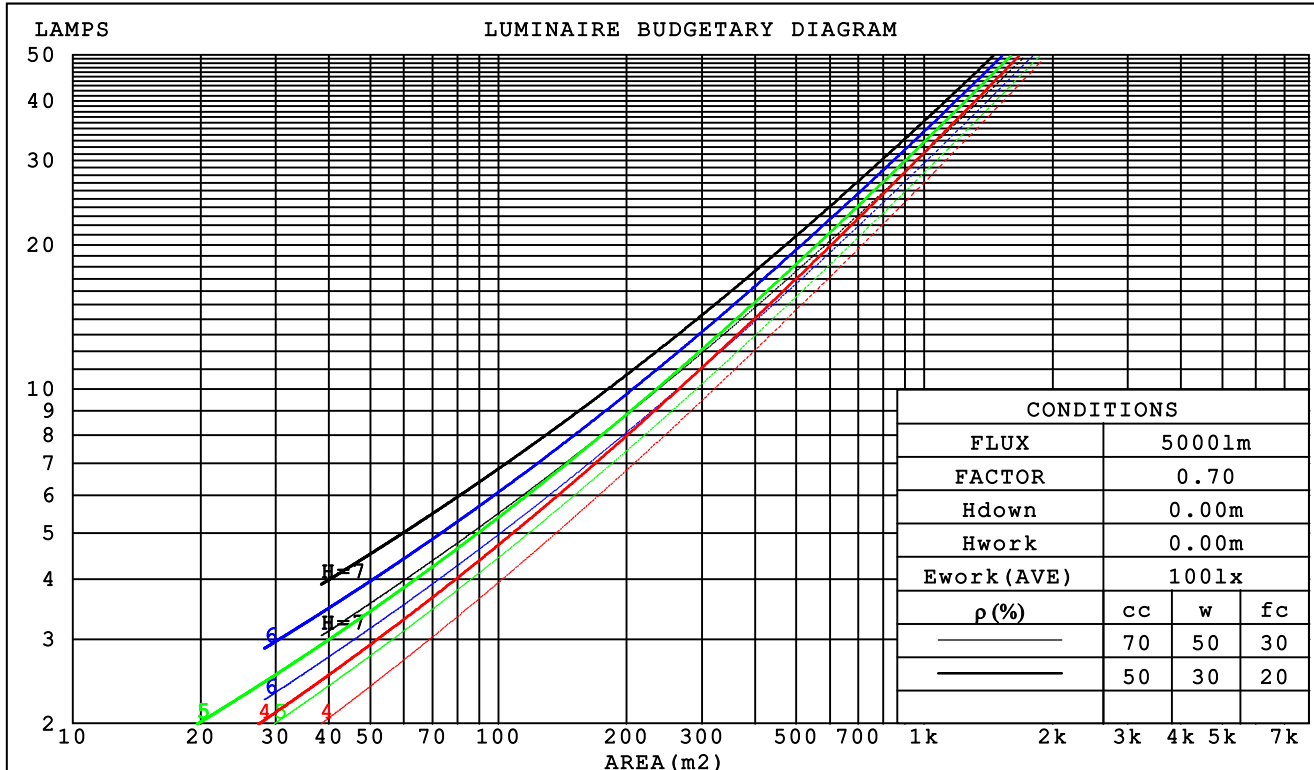
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	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						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	1.00
1.0	1.06	1.02	.98	1.03	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.81	.91	.85	.80	.88	.83	.79	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.81	.73	.68	.78	.72	.66	.75	.70	.65	.72	.68	.64	.62
4.0	.73	.65	.58	.72	.64	.58	.69	.62	.57	.67	.61	.56	.65	.60	.56	.53
5.0	.65	.57	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.53	.48	.46
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.43	.55	.48	.43	.53	.47	.43	.41
7.0	.53	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.38	.48	.42	.38	.36
8.0	.49	.40	.35	.48	.40	.35	.47	.40	.34	.46	.39	.34	.44	.38	.34	.32
9.0	.45	.37	.31	.44	.36	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.41	.34	.28	.41	.33	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm					
NAME:200W SMD LED FLOODLIGHT			TYPE:FLOODLED-PL		WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632			DIM.:		SERIAL No.:027
MFR.:			SUR.:		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	.274	.156	.049	.267	.153	.048	.254	.146	.047	.242	.140	.045	.231	.134	.043	
2.0	.267	.147	.045	.261	.144	.044	.250	.139	.043	.239	.134	.042	.229	.130	.041	
3.0	.252	.134	.040	.247	.132	.040	.237	.128	.039	.227	.125	.038	.219	.121	.037	
4.0	.236	.123	.036	.231	.121	.036	.222	.118	.035	.214	.115	.035	.206	.112	.034	
5.0	.220	.112	.033	.216	.111	.032	.208	.108	.032	.201	.106	.031	.194	.104	.031	
6.0	.206	.103	.030	.202	.102	.029	.195	.100	.029	.188	.098	.029	.182	.096	.028	
7.0	.193	.095	.027	.189	.094	.027	.183	.092	.027	.177	.091	.026	.171	.089	.026	
8.0	.181	.088	.025	.178	.087	.025	.172	.086	.025	.167	.084	.024	.162	.083	.024	
9.0	.170	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.023	.153	.078	.022	
10.0	.160	.077	.021	.158	.076	.021	.153	.075	.021	.149	.074	.021	.145	.073	.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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.098	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	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	21.5	23.0	21.8	23.2	23.4	21.8	23.3	22.1	23.5	23.7
3H	22.4	23.8	22.7	24.0	24.2	23.0	24.4	23.3	24.6	24.8
4H	22.6	23.9	22.9	24.2	24.4	23.3	24.6	23.6	24.8	25.1
6H	22.7	23.9	23.0	24.1	24.4	23.3	24.5	23.6	24.8	25.0
8H	22.6	23.8	23.0	24.1	24.3	23.2	24.4	23.6	24.7	25.0
12H	22.6	23.7	22.9	24.0	24.3	23.2	24.3	23.5	24.6	24.9
4H 2H	22.0	23.3	22.3	23.6	23.8	22.3	23.6	22.6	23.8	24.1
3H	23.1	24.2	23.5	24.5	24.8	23.6	24.7	24.0	25.0	25.3
4H	23.4	24.4	23.7	24.7	25.0	24.0	25.0	24.4	25.3	25.7
6H	23.4	24.3	23.8	24.7	25.0	24.0	24.9	24.4	25.3	25.6
8H	23.4	24.3	23.8	24.6	25.0	24.0	24.8	24.4	25.2	25.5
12H	23.4	24.1	23.8	24.5	24.9	23.9	24.7	24.4	25.1	25.5
8H 4H	23.5	24.3	23.9	24.7	25.1	24.1	24.9	24.5	25.3	25.6
6H	23.6	24.3	24.1	24.7	25.1	24.1	24.8	24.6	25.2	25.6
8H	23.6	24.2	24.1	24.7	25.1	24.1	24.7	24.5	25.1	25.5
12H	23.6	24.1	24.1	24.6	25.1	24.0	24.5	24.5	25.0	25.5
12H 4H	23.5	24.2	23.9	24.6	25.0	24.1	24.8	24.5	25.2	25.6
6H	23.6	24.2	24.1	24.6	25.1	24.1	24.7	24.6	25.1	25.6
8H	23.6	24.1	24.1	24.6	25.0	24.1	24.6	24.5	25.0	25.5

Variations with the observer position at spacings:		
S = 1.0H	+ 0.3 / - 0.3	+ 0.3 / - 0.3
1.5H	+ 0.3 / - 0.5	+ 0.2 / - 0.4
2.0H	+ 0.5 / - 0.4	+ 0.4 / - 0.5

CIE Pub.117 Corrected 17040 lm Total Lamp Luminous Flux. (8log(F/F0) = 9.9)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:

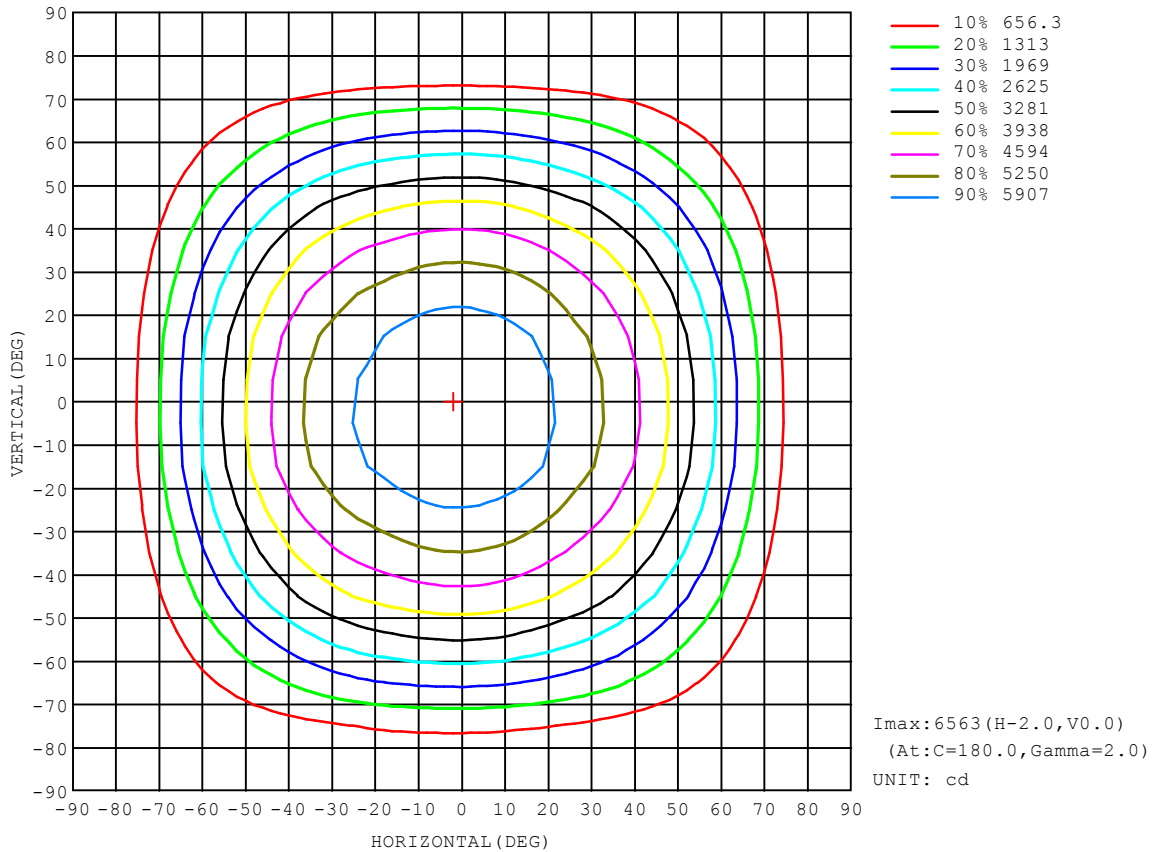
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	60	48	42	59	48	41	58	48	41	35
0.80	70	59	52	69	58	52	67	58	51	45
1.00	79	68	61	77	68	61	75	69	60	54
1.25	86	76	69	84	75	69	82	74	68	61
1.50	91	82	75	89	81	75	86	79	74	66
2.00	97	90	84	96	88	83	92	86	81	74
2.50	101	94	88	99	93	88	95	90	86	78
3.00	104	98	93	102	96	92	98	94	90	82
4.00	108	103	99	106	101	97	101	98	95	86
5.00	110	106	102	108	104	101	103	100	97	89
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:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:

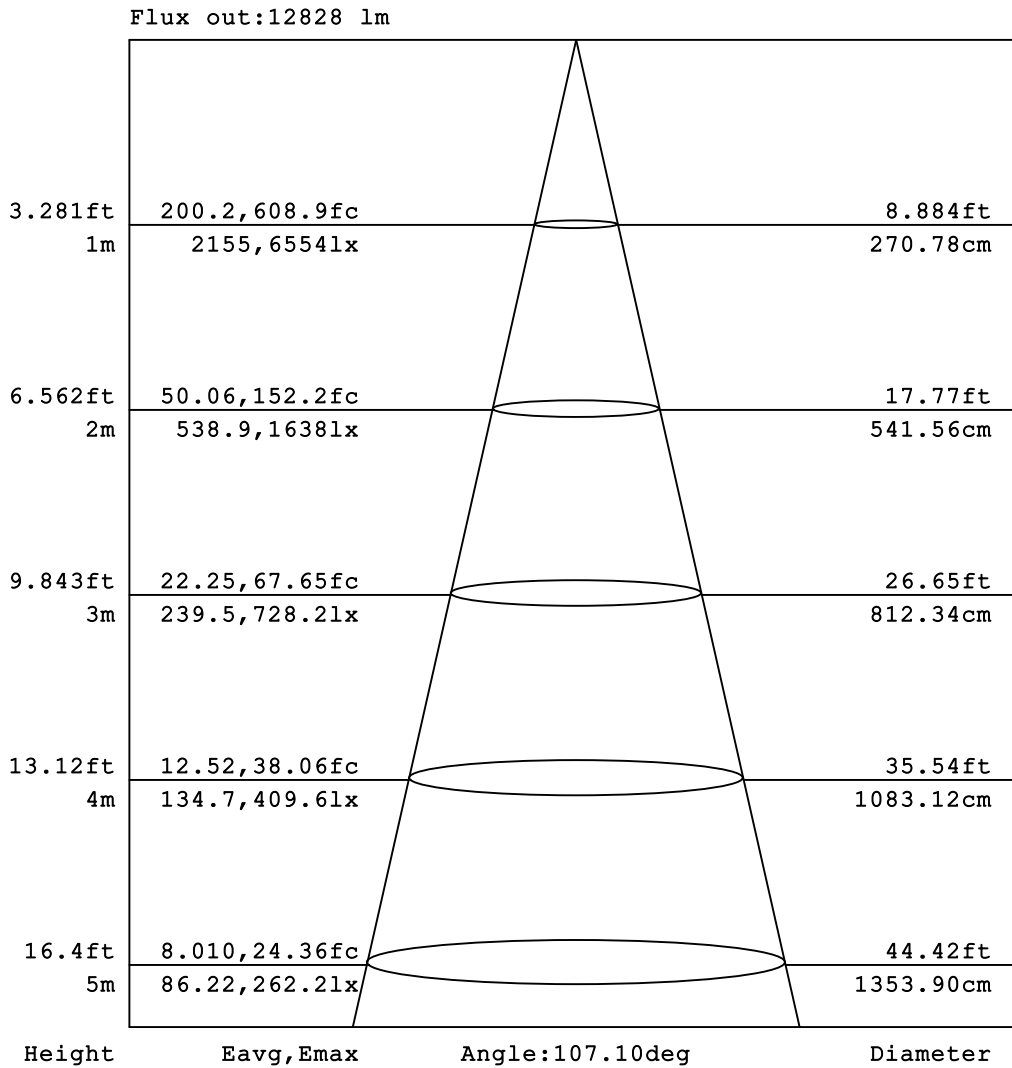


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:



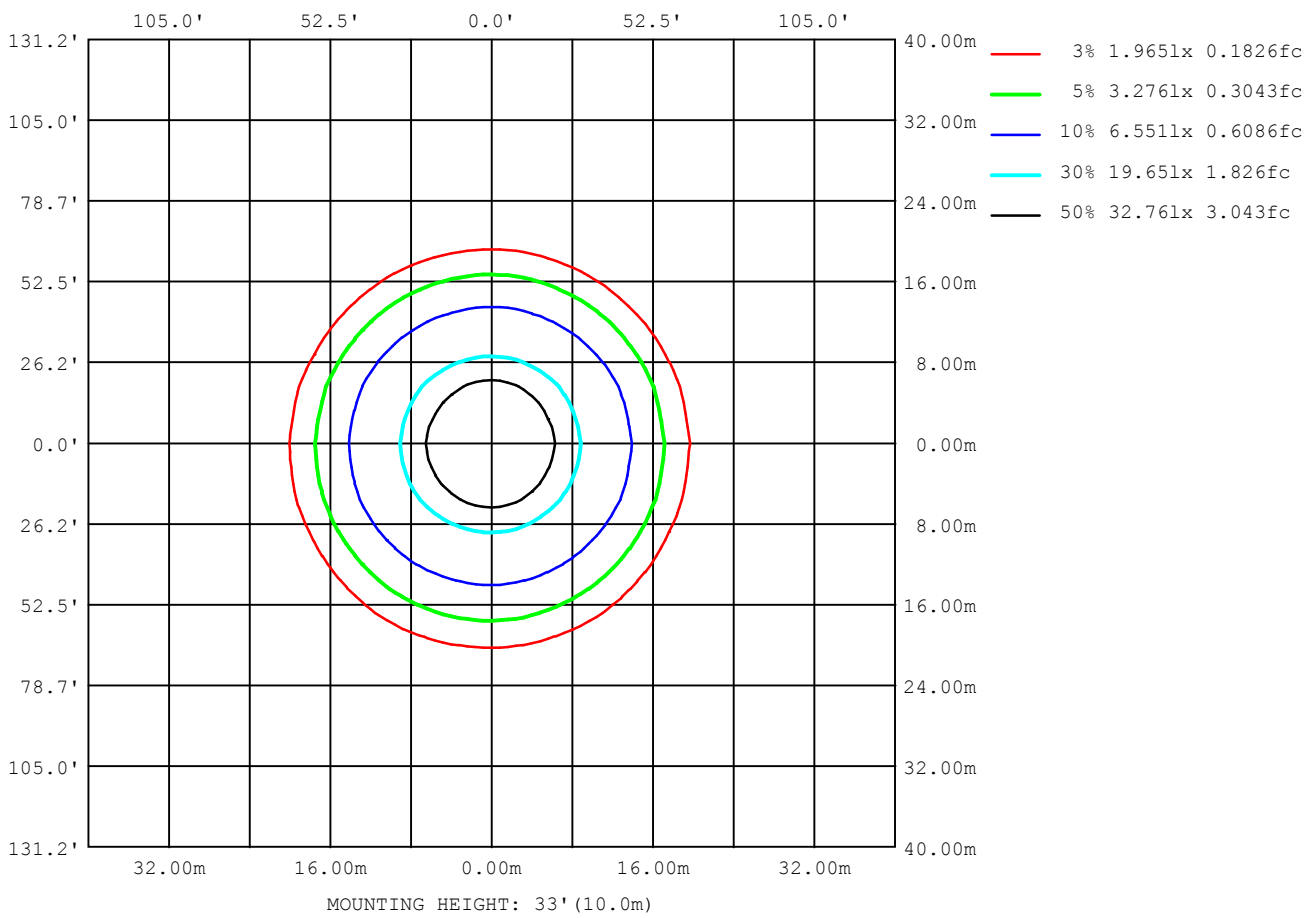
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 18.625m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

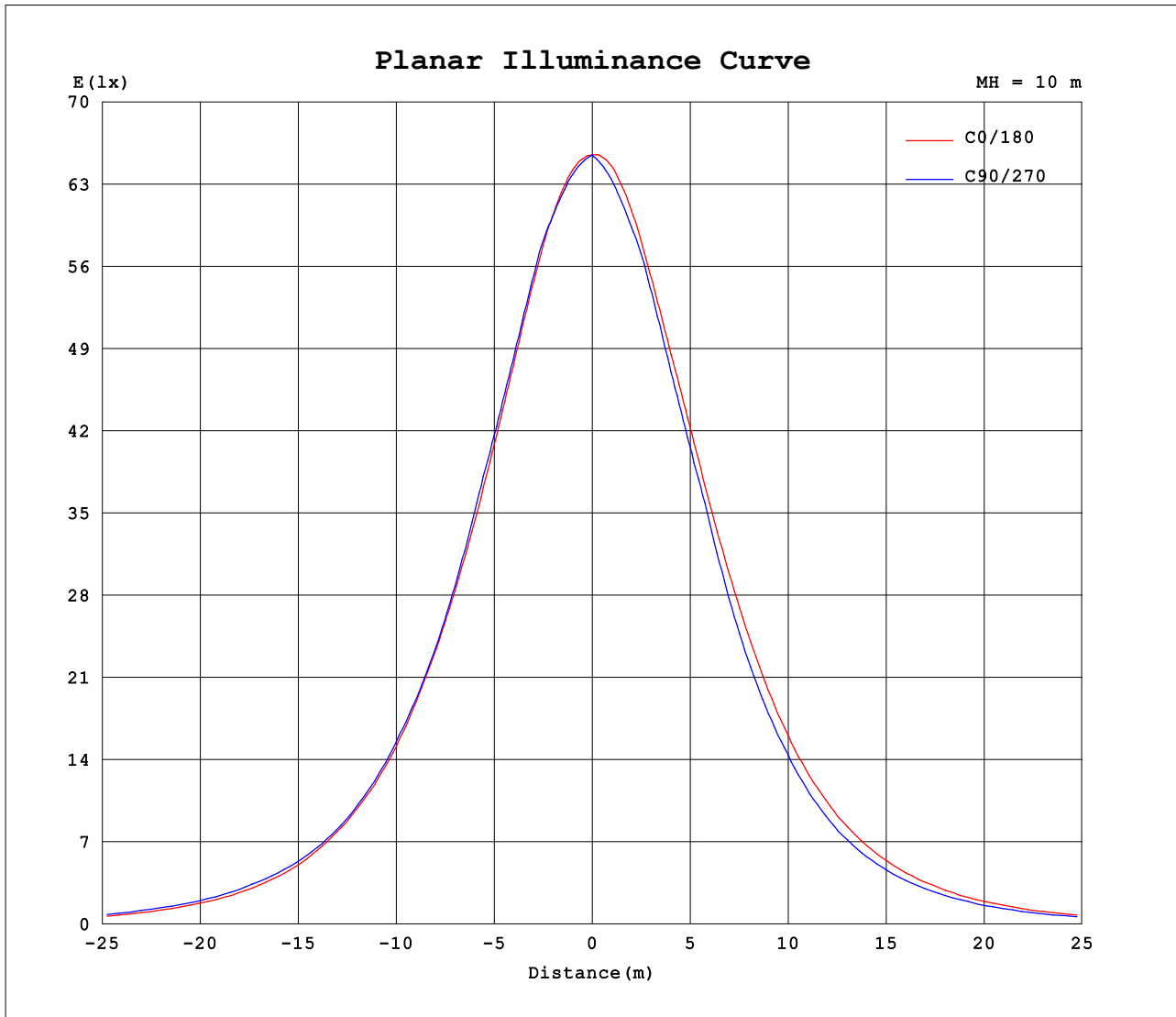
Test:U:220.5V I:0.8635A P:189.7W PF:0.9963 Lamp Flux:17040.3x1 lm		
NAME:200W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-09602;BT61-09612;BT61-09632	DIM.:	SERIAL No.:027
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.625m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2016-12-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity: 65.0%
Test Distance: 18.625m [K=1.0000]
Remarks:

