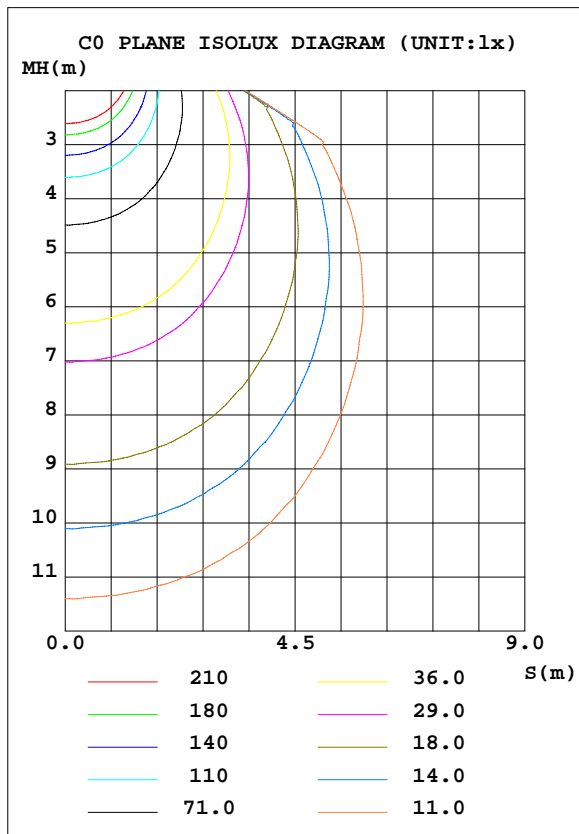
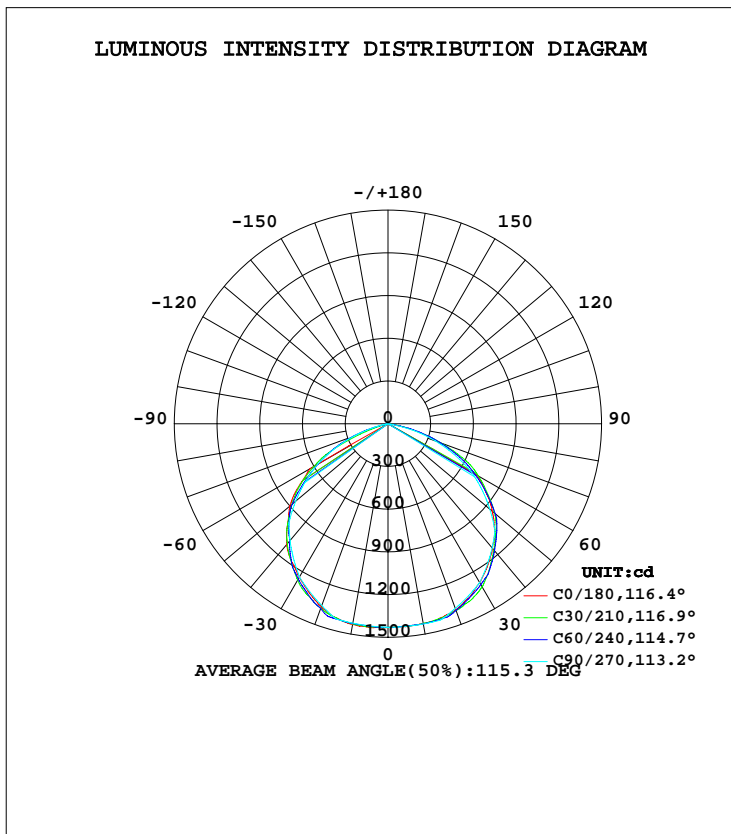


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 50W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-05002;BT61-05012;BT61-05032;BT61-05052;BT61-05092	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	6500K	Imax(cd)	1438	S/MH(C0/180)	1.33
NOMINAL POWER(W)	48.3	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3937.5	η UP, DN(C0-180)	0.0, 51.6
NOMINAL FLUX(lm)	3937.45	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 48.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	232.3	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:2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.110m [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	1430	1427	1429	1433	1438	1429	1426	1424	0- 5	34.18	34.18	0.87,0.87
10	1426	1426	1428	1430	1431	1425	1422	1419	5- 10	102.1	136.3	3.46,3.46
15	1413	1420	1427	1425	1411	1417	1418	1410	10- 15	168.6	305.0	7.75,7.75
20	1391	1407	1381	1408	1368	1401	1360	1395	15- 20	231.1	536.0	13.6,13.6
25	1348	1364	1335	1353	1311	1333	1301	1344	20- 25	285.3	821.3	20.9,20.9
30	1289	1308	1288	1283	1243	1253	1243	1280	25- 30	330.6	1152	29.3,29.3
35	1220	1242	1213	1214	1181	1175	1156	1205	30- 35	365.7	1518	38.5,38.5
40	1143	1171	1138	1129	1106	1092	1070	1124	35- 40	388.5	1906	48.4,48.4
45	1059	1070	1063	1033	995.5	983.4	983.7	1018	40- 45	398.9	2305	58.5,58.5
50	955.6	969.8	933.8	930.8	900.0	862.3	845.7	908.0	45- 50	394.4	2699	68.6,68.6
55	840.7	864.1	804.7	813.4	763.8	736.7	707.6	793.5	50- 55	372.4	3072	78,78
60	723.1	716.3	675.6	655.4	634.2	583.7	569.6	645.8	55- 60	333.5	3405	86.5,86.5
65	0	571.6	514.9	494.4	0	423.0	412.6	487.1	60- 65	247.7	3653	92.8,92.8
70	0	416.8	354.1	344.5	0	247.8	255.7	319.1	65- 70	159.9	3813	96.8,96.8
75	0	236.4	193.4	172.2	0	110.4	98.75	156.1	70- 75	90.86	3904	99.1,99.1
80	0	64.21	0	16.66	0	2.461	0	15.52	75- 80	32.05	3936	100,100
85	0	0	0	0	0	0	0	0	80- 85	1.567	3937	100,100
90	0	0	0	0	0	0	0	0	85- 90	0	3937	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		

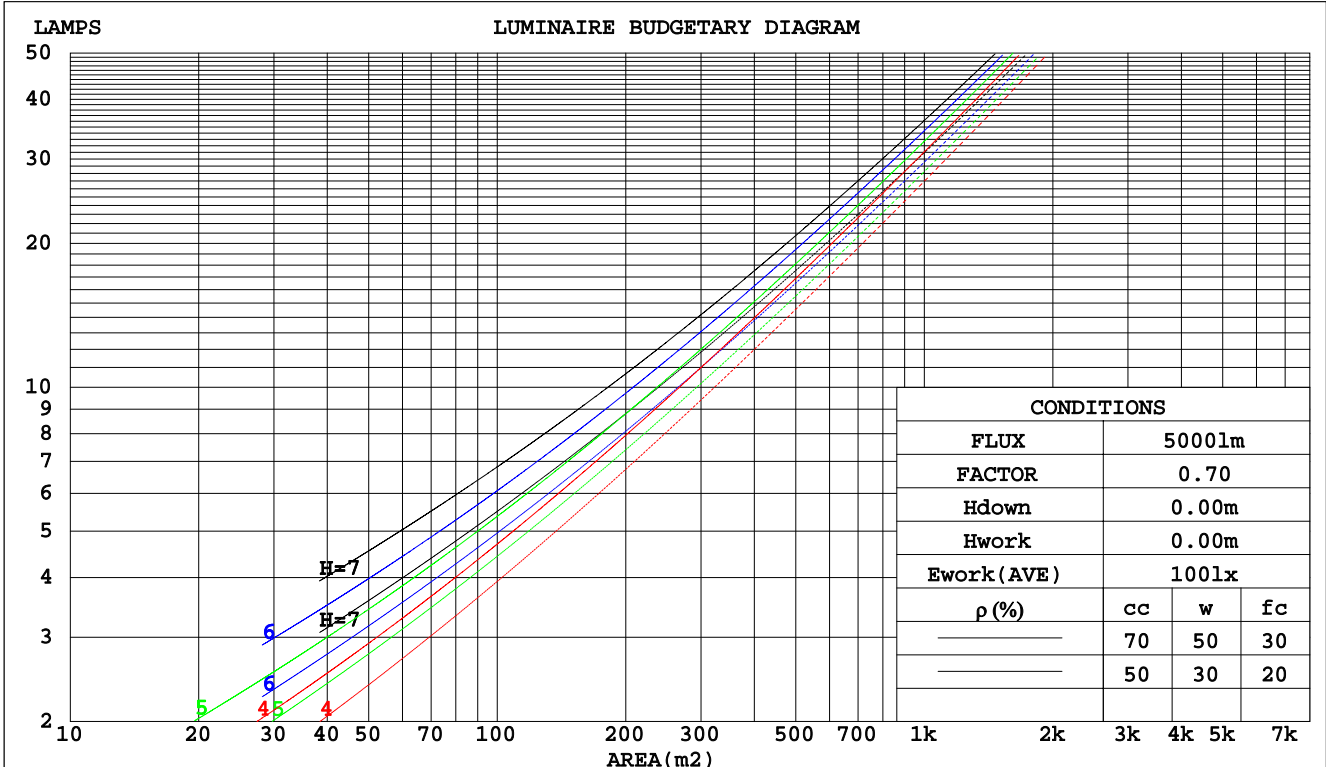
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.110m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: 50W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-05002;BT61-05012;BT61-05032;BT61-05052;BT61-05092	SPEC.:	SERIAL No.:
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	.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.90	.97	.94	.96	.94	.91	.92	.90	.89	.87
2.0	.93	.87	.82	.92	.86	.81	.88	.83	.79	.85	.81	.77	.82	.79	.76	.74
3.0	.83	.75	.69	.81	.74	.68	.78	.72	.67	.75	.70	.66	.73	.68	.65	.63
4.0	.73	.65	.59	.72	.64	.58	.70	.63	.57	.67	.61	.57	.65	.60	.56	.54
5.0	.66	.57	.51	.64	.56	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.47
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.44	.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	.35	.31	.41	.35	.31	.29
10.0	.41	.33	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.26



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.110m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: 50W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-05002;BT61-05012;BT61-05032;BT61-05052;BT61-05092	SPEC.:	SERIAL No.:
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	.268	.152	.048	.261	.149	.047	.248	.142	.045	.236	.136	.044	.225	.130	.042	
2.0	.263	.144	.044	.257	.142	.044	.246	.137	.042	.235	.132	.041	.225	.128	.040	
3.0	.250	.133	.040	.244	.131	.039	.234	.127	.039	.225	.123	.038	.216	.120	.037	
4.0	.235	.122	.036	.230	.120	.036	.221	.117	.035	.213	.114	.034	.205	.111	.034	
5.0	.220	.112	.032	.215	.111	.032	.207	.108	.032	.200	.105	.031	.193	.103	.031	
6.0	.205	.103	.029	.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	.088	.025	.172	.086	.025	.167	.084	.024	.162	.083	.024	
9.0	.170	.082	.023	.167	.082	.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	.177	.157	.138	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.101	.144	.114	.088	.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	.153	.101	.060	.132	.087	.053	.090	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.126	.078	.042	.087	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.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:2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.110m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: 50W SMD LED FLOODLIGHT					TYPE: FLOODLED-PL					WEIGHT:				
MODEL NO.: BT61-05002;BT61-05012;BT61-05032;BT61-05052;BT61-05092					SPEC.:					SERIAL No.:				
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	22.5	23.9	22.7	24.1	24.3	22.6	24.1	22.9	24.3	24.5
3H	22.4	23.7	22.7	24.0	24.2	23.8	25.2	24.1	25.4	25.6
4H	22.3	23.6	22.6	23.8	24.1	24.1	25.4	24.4	25.6	25.9
6H	22.2	23.4	22.5	23.6	23.9	24.1	25.3	24.4	25.6	25.8
8H	22.1	23.3	22.5	23.5	23.8	24.1	25.2	24.4	25.5	25.8
12H	22.1	23.2	22.4	23.5	23.8	24.0	25.1	24.4	25.4	25.7
4H 2H	23.1	24.4	23.5	24.7	24.9	23.3	24.5	23.6	24.8	25.0
3H	23.6	24.7	24.0	25.0	25.3	24.6	25.7	25.0	26.0	26.3
4H	23.6	24.5	23.9	24.9	25.2	25.0	26.0	25.4	26.3	26.7
6H	23.5	24.3	23.9	24.7	25.0	25.0	25.9	25.4	26.2	26.6
8H	23.4	24.2	23.8	24.6	25.0	25.0	25.8	25.4	26.2	26.5
12H	23.4	24.1	23.8	24.5	24.9	24.9	25.7	25.4	26.1	26.5
8H 4H	23.8	24.6	24.2	25.0	25.4	25.1	26.0	25.6	26.3	26.7
6H	23.8	24.4	24.2	24.8	25.3	25.2	25.9	25.6	26.3	26.7
8H	23.7	24.3	24.2	24.7	25.2	25.2	25.7	25.6	26.2	26.6
12H	23.7	24.2	24.2	24.6	25.1	25.1	25.6	25.6	26.1	26.5
12H 4H	23.8	24.5	24.2	24.9	25.3	25.1	25.8	25.5	26.2	26.6
6H	23.7	24.3	24.2	24.7	25.2	25.2	25.7	25.6	26.2	26.6
8H	23.7	24.2	24.2	24.6	25.1	25.1	25.6	25.6	26.1	26.5

Variations with the observer position at spacings:		
S = 1.0H	+ 0.6 / - 0.7	+ 0.3 / - 0.3
1.5H	+ 0.7 / - 0.8	+ 0.3 / - 0.5
2.0H	+ 0.6 / - 1.3	+ 0.3 / - 0.4

CIE Pub.117 Corrected 3937 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:
 Test Date: 2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity: 65.0%
 Test Distance: 10.110m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME: 50W SMD LED FLOODLIGHT	TYPE: FLOODLED-PL	WEIGHT:
MODEL NO.: BT61-05002; BT61-05012; BT61-05032; BT61-05052; BT61-05092	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

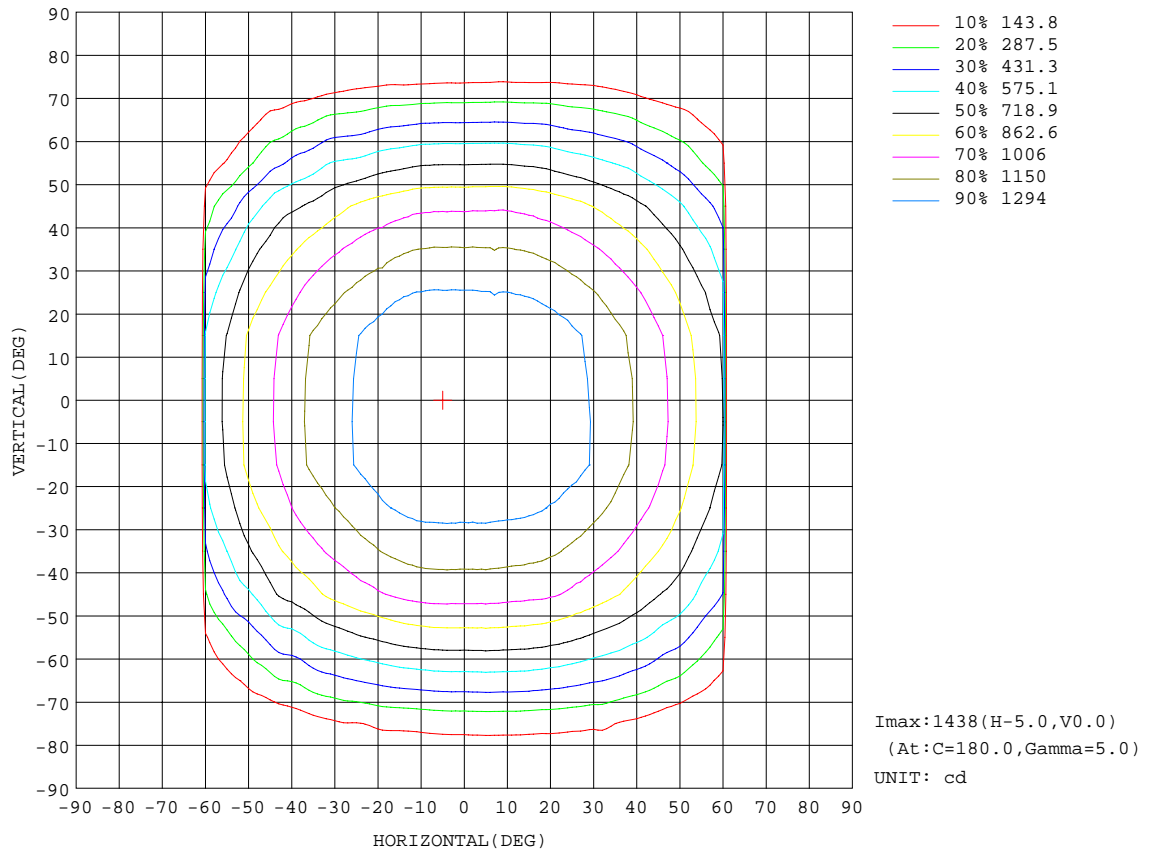
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	58	47	41	57	47	41	34
0.80	70	59	51	69	58	51	67	57	51	44
1.00	79	68	61	78	68	61	75	69	61	54
1.25	86	76	70	85	76	69	82	74	68	62
1.50	91	82	76	89	81	75	86	79	74	67
2.00	98	90	84	96	89	83	93	87	82	75
2.50	101	94	89	99	93	88	96	90	86	78
3.00	104	98	93	102	97	92	98	94	90	82
4.00	108	103	99	106	101	98	102	98	95	86
5.00	110	106	102	108	104	101	103	100	98	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: 2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity: 65.0%
 Test Distance: 10.110m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: 50W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BP61-05002;BP61-05012;BP61-05032;BP61-05052;BP61-05092	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

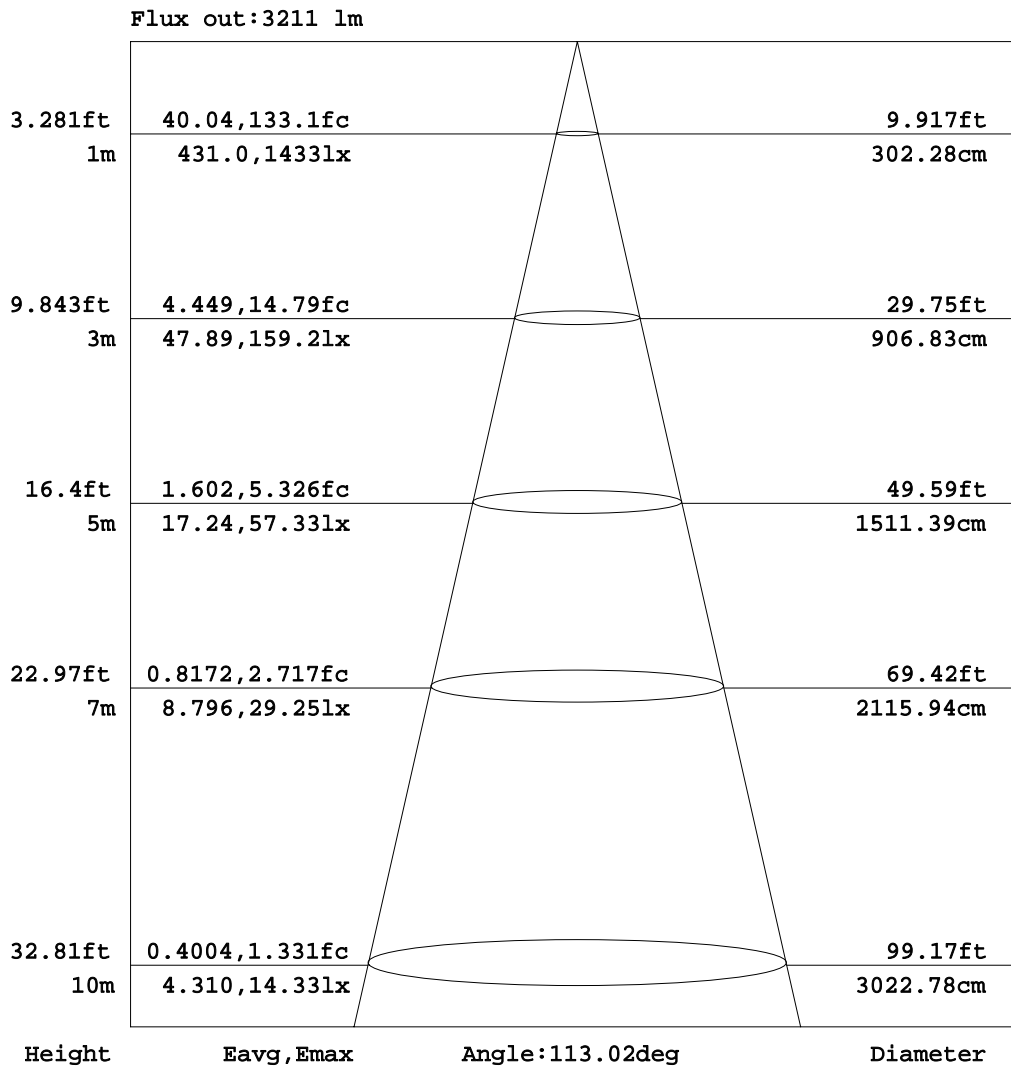


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity: 65.0%
 Test Distance: 10.110m [K=1.0000]
 Remarks:

AAI Figure

NAME: 50W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-05002;BT61-05012;BT61-05032;BT61-05052;BT61-05092	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



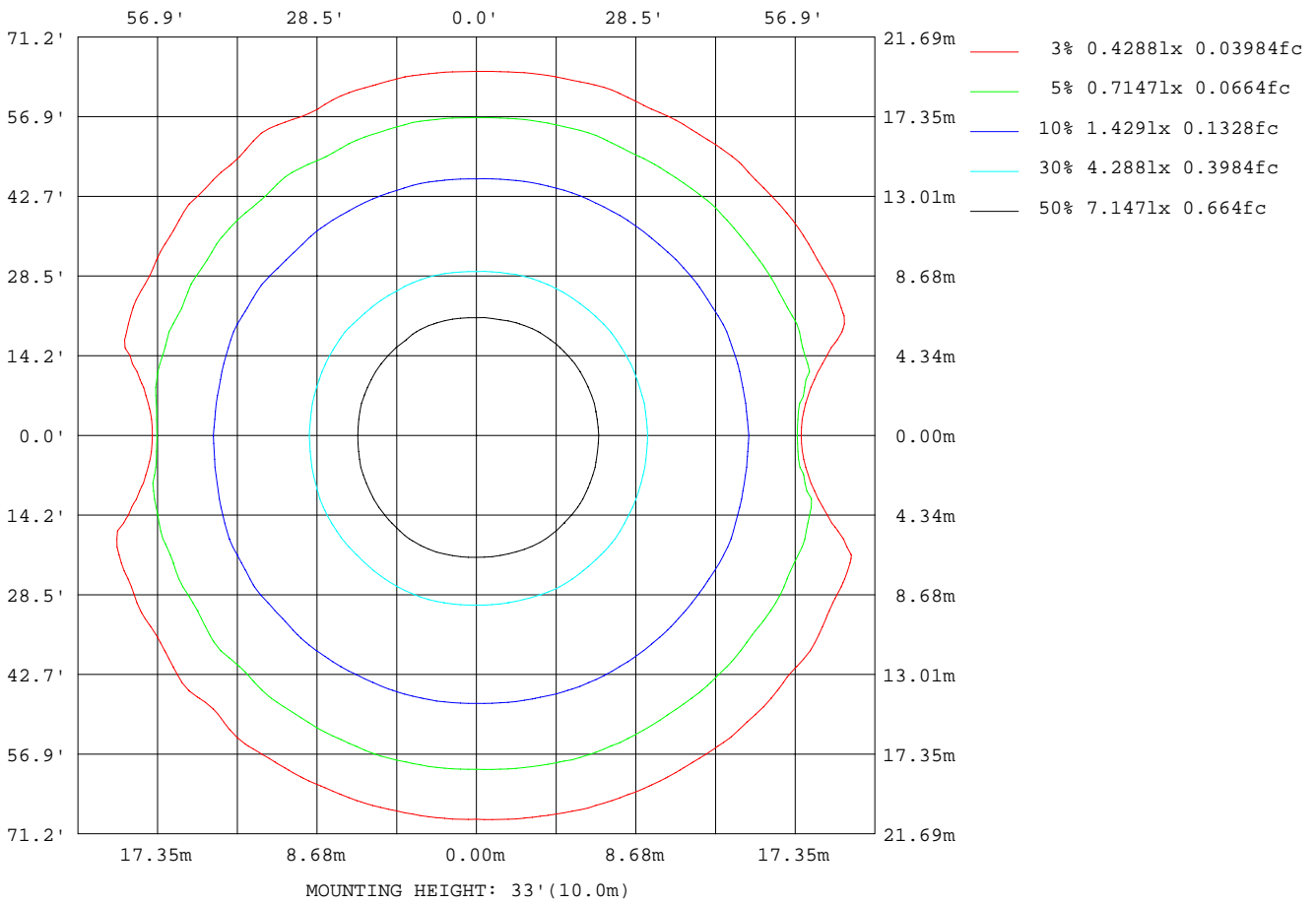
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity:65.0%
 Test Distance:10.110m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

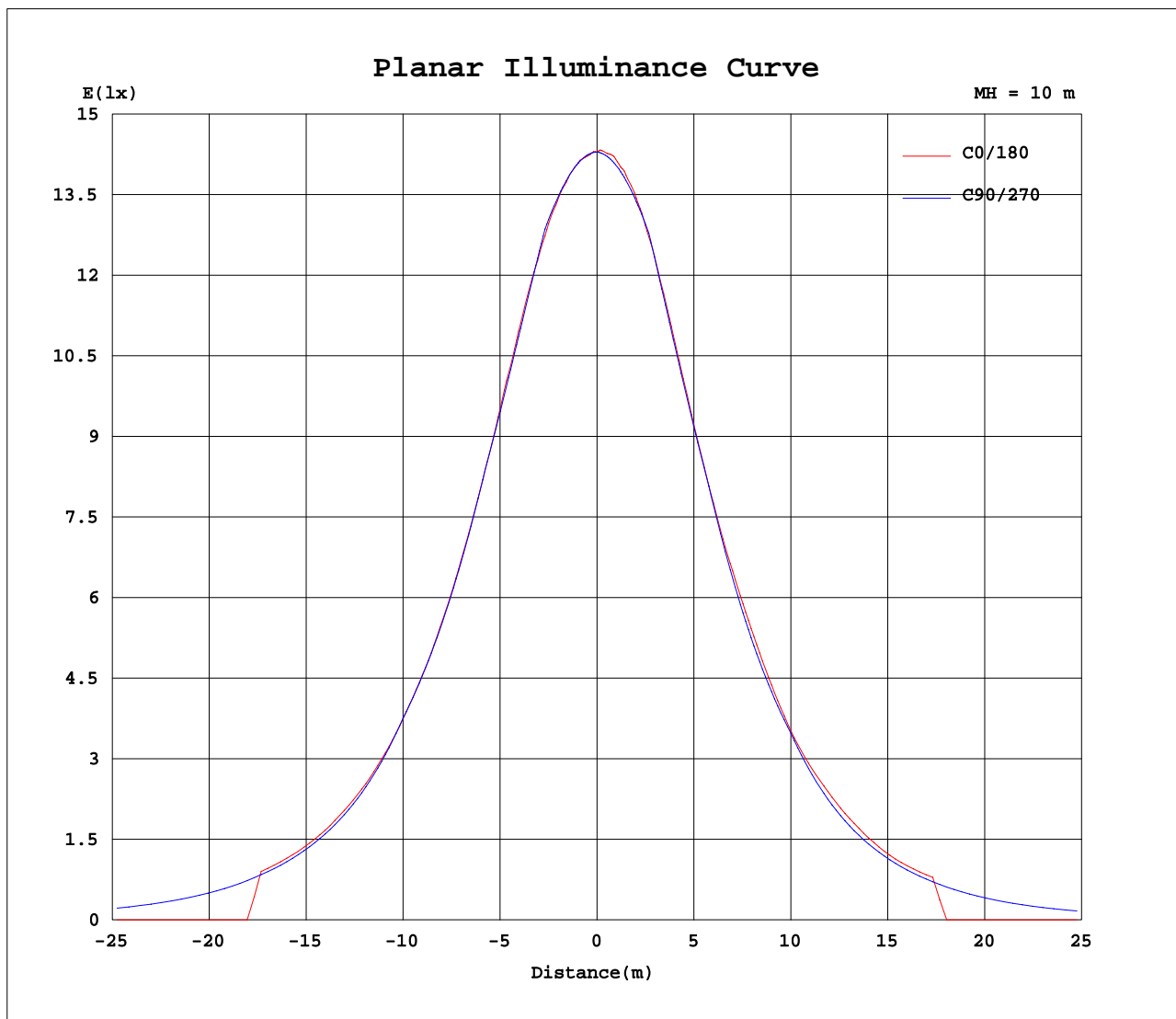
NAME: 50W SMD LED FLOODLIGHT	TYPE:FLOODLED-PL	WEIGHT:
MODEL NO.:BT61-05002;BT61-05012;BT61-05032;BT61-05052;BT61-05092	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
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 Test Speed: HIGH
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.266
 Humidity: 65.0%
 Test Distance: 10.110m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2017-07-22

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.266
Humidity: 65.0%
Test Distance: 10.110m [K=1.0000]
Remarks: