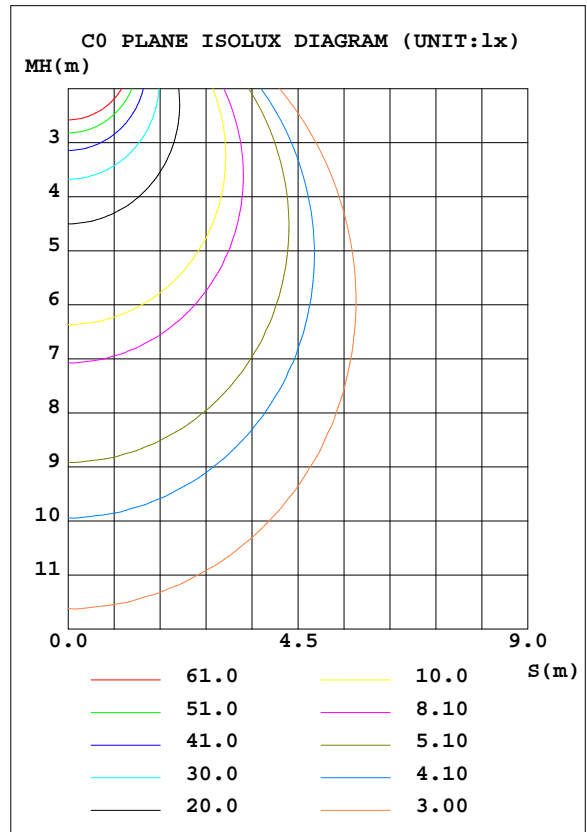
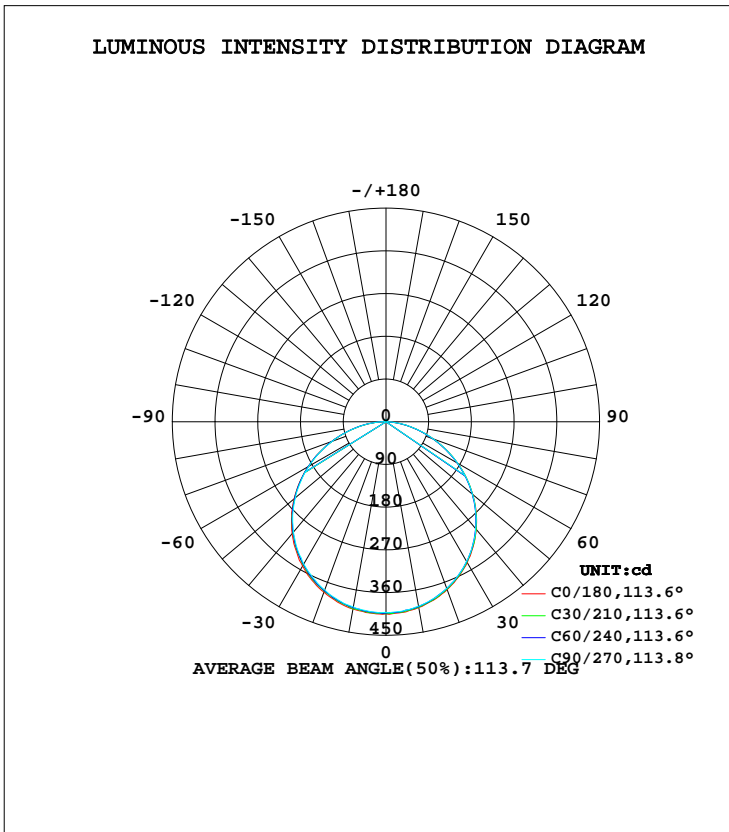


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 63.33 lm/W			
MODEL		I <sub>max</sub> (cd)	405.7	S/MH(C0/180)	1.26
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1193.5	η UP, DN(C0-180)	0.9, 47.8
NOMINAL FLUX(lm)	1193.47	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.7, 50.6
LAMPS INSIDE	1	η up(%)	1.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.5	η down(%)	98.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [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
10	397.1	396.2	394.3	394.3	400.5	399.1	396.2	396.0	0- 10	38.16	38.16	3.2,3.2
20	376.5	374.6	373.5	374.0	382.2	379.9	377.3	377.2	10- 20	109.6	147.8	12.4,12.4
30	342.8	340.9	339.7	340.3	351.2	348.5	346.5	345.6	20- 30	166.9	314.6	26.4,26.4
40	295.7	294.8	294.1	294.8	307.6	305.0	303.1	302.2	30- 40	202.2	516.8	43.3,43.3
50	238.6	238.1	237.9	238.5	252.9	251.5	249.3	248.1	40- 50	210.5	727.3	60.9,60.9
60	174.2	173.0	174.0	174.7	189.5	188.9	187.7	185.5	50- 60	190.6	917.9	76.9,76.9
70	106.3	105.4	106.7	107.9	121.6	121.7	120.9	118.8	60- 70	145.7	1064	89.1,89.1
80	42.70	42.59	44.21	45.06	56.04	56.80	56.31	54.78	70- 80	85.42	1149	96.3,96.3
90	2.320	2.295	2.263	2.324	4.176	4.868	4.224	3.614	80- 90	25.35	1174	98.4,98.4
100	2.619	2.590	2.594	2.597	1.703	1.734	1.712	1.730	90-100	2.283	1177	98.6,98.6
110	2.960	2.941	2.945	2.927	2.093	2.104	2.110	2.100	100-110	2.470	1179	98.8,98.8
120	3.306	3.292	3.294	3.278	2.527	2.523	2.516	2.505	110-120	2.689	1182	99,99
130	3.627	3.608	3.602	3.588	2.964	2.968	2.942	2.945	120-130	2.771	1185	99.3,99.3
140	3.975	3.955	3.948	3.929	3.421	3.428	3.394	3.395	130-140	2.690	1187	99.5,99.5
150	4.304	4.279	4.265	4.241	3.847	3.840	3.815	3.805	140-150	2.422	1190	99.7,99.7
160	4.588	4.544	4.555	4.507	4.294	4.250	4.267	4.219	150-160	1.948	1192	99.9,99.9
170	4.805	4.777	4.779	4.737	4.668	4.614	4.624	4.585	160-170	1.287	1193	100,100
180	4.888	4.848	4.852	4.839	4.908	4.846	4.846	4.839	170-180	0.4546	1193	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

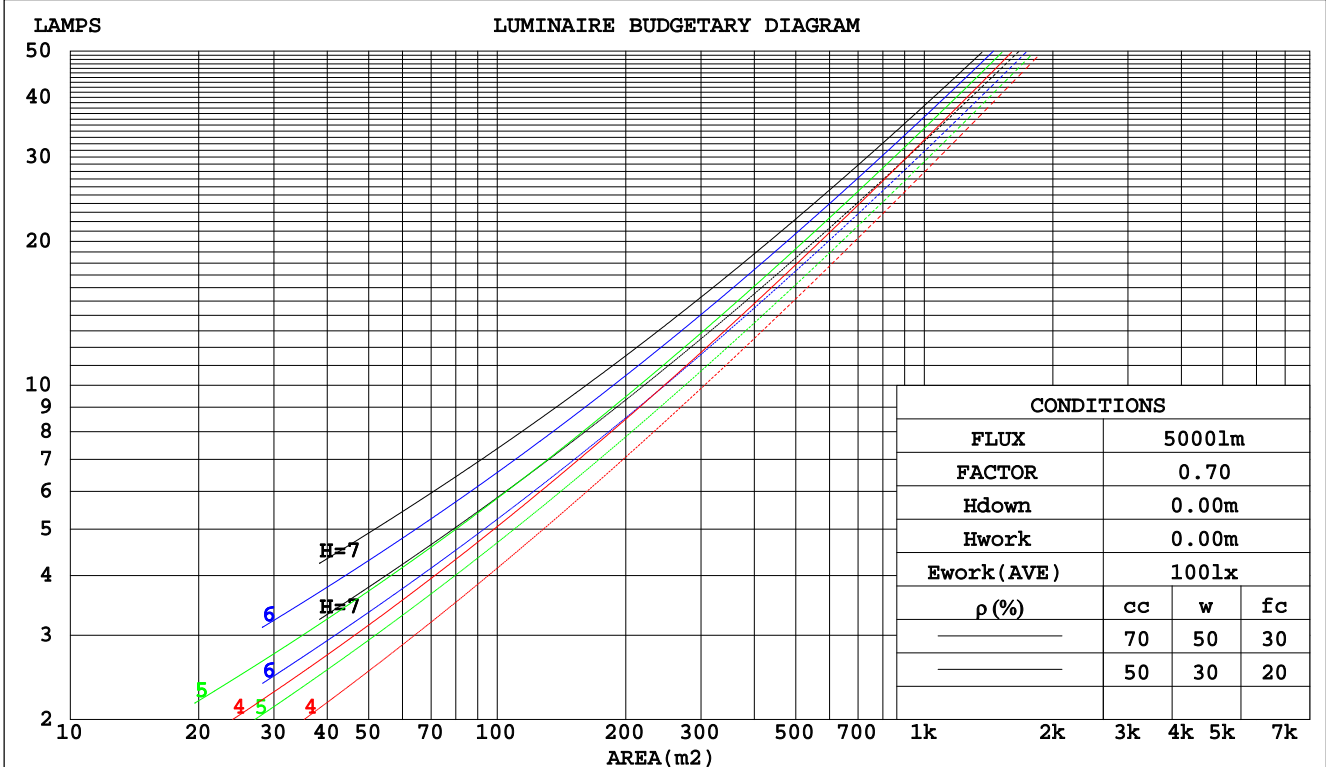
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	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	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.98
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.82
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.80	.76	.72	.77	.74	.70	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.65	.61	.68	.63	.59	.57
4.0	.70	.61	.54	.68	.60	.54	.65	.58	.53	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.56	.50	.45	.54	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.49	.43	.39	.37
7.0	.51	.42	.36	.50	.41	.35	.48	.41	.35	.46	.40	.35	.45	.39	.34	.32
8.0	.46	.38	.32	.45	.37	.32	.44	.37	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.29	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	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	.314	.178	.056	.306	.175	.055	.292	.167	.053	.279	.161	.052	.267	.155	.050	
2.0	.294	.161	.049	.287	.158	.049	.275	.153	.047	.263	.148	.046	.252	.143	.045	
3.0	.271	.144	.043	.266	.142	.043	.254	.138	.042	.244	.134	.041	.234	.130	.040	
4.0	.250	.130	.038	.245	.128	.038	.235	.125	.037	.226	.121	.037	.217	.118	.036	
5.0	.231	.118	.034	.226	.116	.034	.218	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.214	.107	.031	.210	.106	.031	.202	.104	.030	.195	.101	.030	.188	.099	.029	
7.0	.199	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.176	.091	.027	
8.0	.186	.091	.026	.183	.090	.025	.176	.088	.025	.170	.086	.025	.165	.085	.025	
9.0	.174	.084	.024	.171	.083	.023	.165	.082	.023	.160	.080	.023	.155	.079	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.146	.074	.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	.203	.203	.203	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.193	.168	.146	.165	.144	.126	.113	.099	.087	.065	.058	.051	.021	.019	.016	
2.0	.185	.144	.110	.158	.124	.095	.109	.086	.066	.063	.050	.039	.020	.016	.013	
3.0	.177	.127	.086	.152	.109	.075	.104	.076	.053	.060	.044	.031	.019	.014	.010	
4.0	.170	.113	.071	.145	.098	.061	.100	.068	.043	.058	.040	.026	.019	.013	.008	
5.0	.162	.103	.060	.139	.089	.052	.096	.062	.037	.056	.037	.022	.018	.012	.007	
6.0	.155	.095	.052	.133	.082	.045	.092	.057	.032	.053	.034	.019	.017	.011	.006	
7.0	.148	.088	.046	.127	.076	.040	.088	.053	.028	.051	.031	.017	.017	.010	.006	
8.0	.142	.082	.041	.122	.071	.036	.084	.050	.026	.049	.030	.015	.016	.010	.005	
9.0	.136	.077	.038	.117	.067	.033	.081	.047	.023	.047	.028	.014	.015	.009	.005	
10.0	.130	.073	.035	.112	.063	.031	.078	.045	.022	.045	.026	.013	.015	.009	.004	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

NAME: SLIMB230-3K		TYPE:3000K					WEIGHT:				
DIM.: D230*15mm		SPEC.:D230 Dimmable 3000K					SERIAL No.:1				
MFR.: EVERFINE		SUR.:0.175*0.175					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	22.1	23.6	22.4	23.8	24.1	22.1	23.6	22.4	23.8	24.0	
3H	23.5	24.9	23.9	25.2	25.5	23.5	24.9	23.8	25.2	25.4	
4H	24.1	25.4	24.4	25.7	26.0	24.1	25.4	24.4	25.7	26.0	
6H	24.5	25.7	24.8	26.0	26.3	24.5	25.7	24.9	26.0	26.4	
8H	24.6	25.8	25.0	26.1	26.4	24.6	25.8	25.0	26.1	26.5	
12H	24.6	25.8	25.0	26.1	26.5	24.7	25.8	25.1	26.2	26.5	
4H 2H	22.7	24.0	23.0	24.3	24.6	22.6	24.0	23.0	24.2	24.5	
3H	24.3	25.5	24.7	25.8	26.1	24.3	25.4	24.7	25.8	26.1	
4H	25.0	26.0	25.4	26.4	26.7	25.0	26.0	25.4	26.4	26.7	
6H	25.5	26.4	25.9	26.8	27.2	25.5	26.4	25.9	26.8	27.2	
8H	25.6	26.5	26.1	26.9	27.3	25.7	26.5	26.1	26.9	27.4	
12H	25.7	26.5	26.2	26.9	27.4	25.8	26.6	26.2	27.0	27.4	
8H 4H	25.2	26.1	25.6	26.5	26.9	25.2	26.1	25.6	26.5	26.9	
6H	25.8	26.6	26.3	27.0	27.5	25.9	26.6	26.3	27.0	27.5	
8H	26.1	26.7	26.6	27.2	27.7	26.1	26.8	26.6	27.2	27.7	
12H	26.2	26.8	26.7	27.2	27.8	26.3	26.8	26.8	27.3	27.8	
12H 4H	25.2	26.0	25.7	26.4	26.9	25.2	26.0	25.7	26.4	26.9	
6H	25.9	26.5	26.4	27.0	27.5	25.9	26.6	26.4	27.0	27.5	
8H	26.2	26.7	26.7	27.2	27.7	26.2	26.7	26.7	27.2	27.7	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					

CIE Pub.117 Corrected 1193 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.6)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	PROTECTION ANGLE:

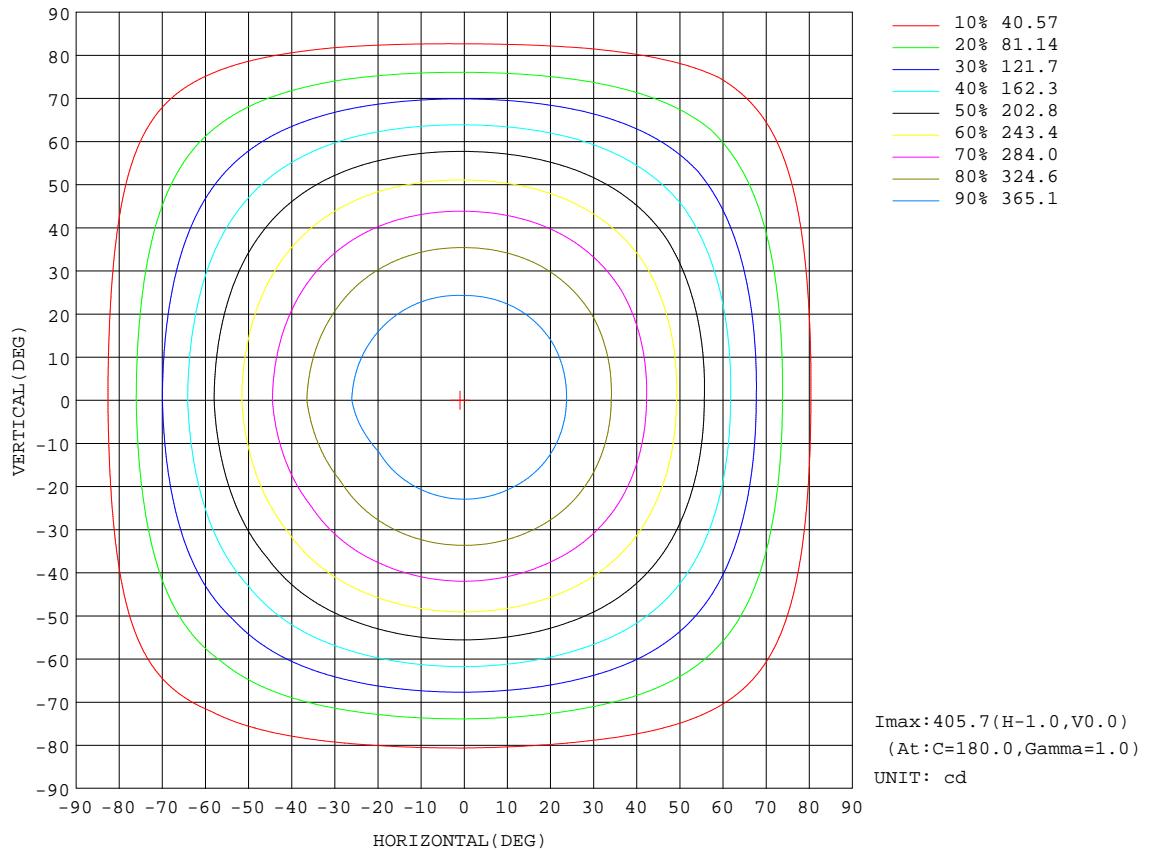
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	56	74	63	56	71	65	56	48
1.25	82	72	64	81	71	64	78	69	63	55
1.50	87	77	70	85	76	70	82	74	68	61
2.00	94	85	79	92	84	78	88	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	102	95	89	99	93	88	95	90	85	76
4.00	106	100	95	103	98	93	99	94	91	81
5.00	108	103	99	105	101	97	101	97	94	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	PROTECTION ANGLE:

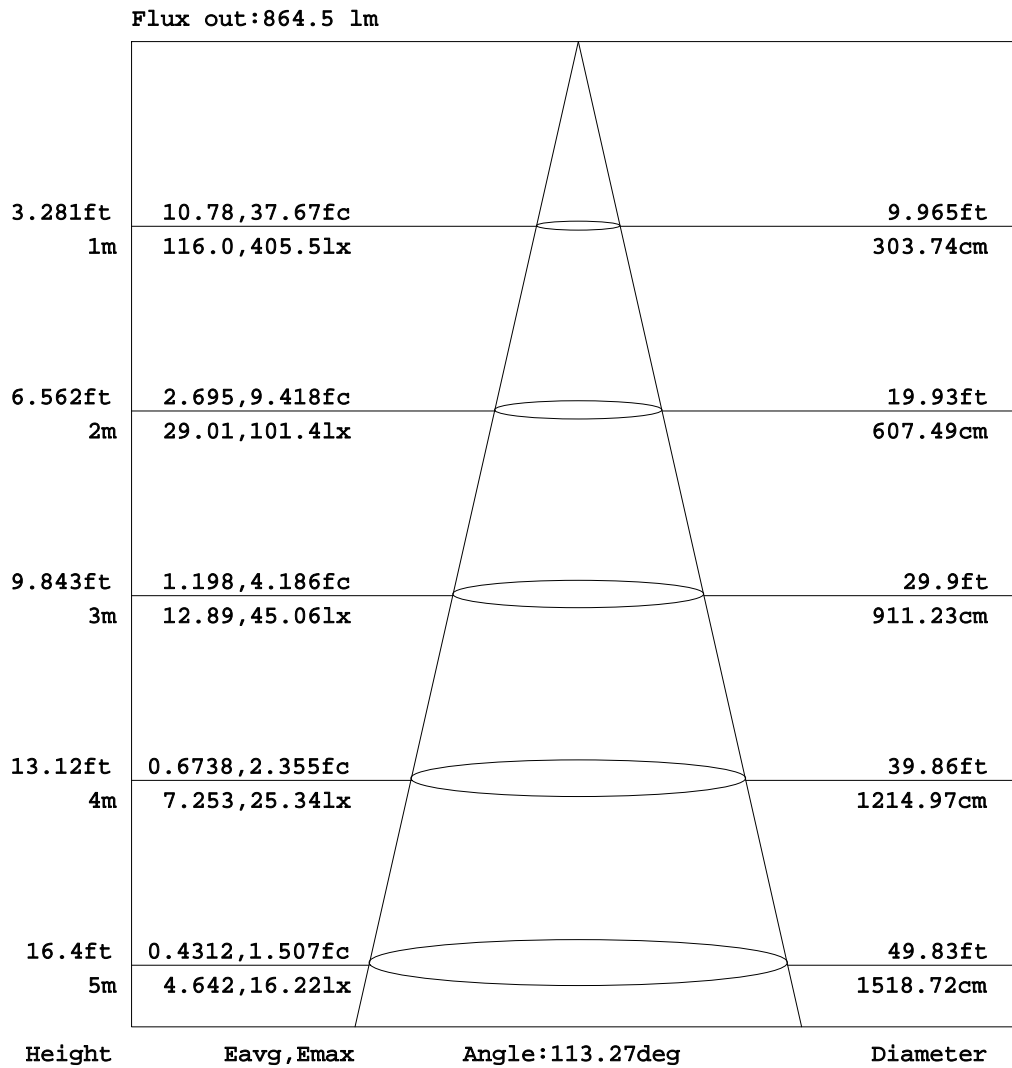


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity: 65.0%  
 Test Distance: 6.400m [K=1.0000]  
 Remarks:

**AAI Figure**

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	PROTECTION ANGLE:



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

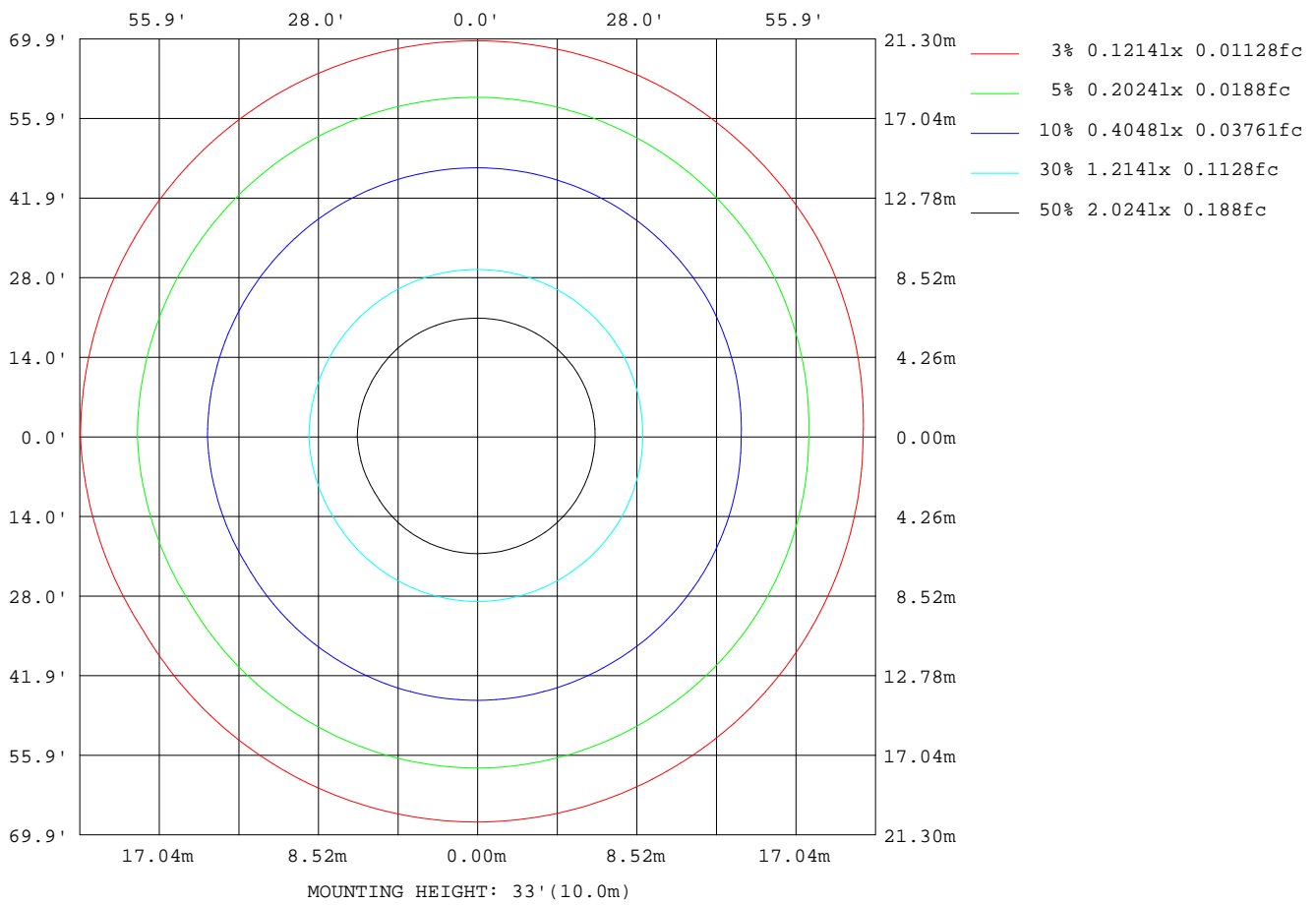
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**

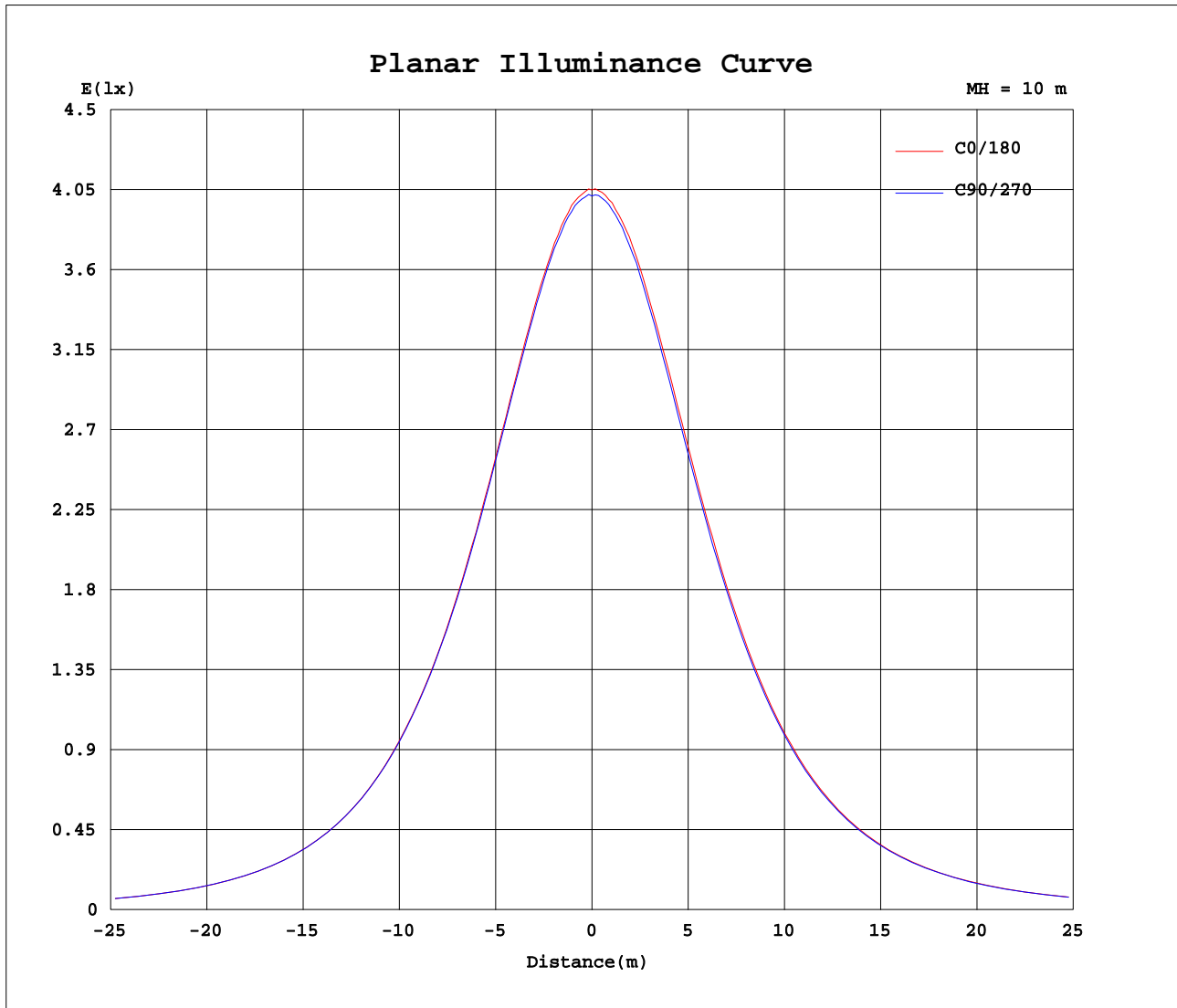
NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity: 65.0%  
 Test Distance: 6.400m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: SLIMB230-3K	TYPE:3000K	WEIGHT:
DIM.: D230*15mm	SPEC.:D230 Dimmable 3000K	SERIAL No.:1
MFR.: EVERFINE	SUR.:0.175*0.175	PROTECTION ANGLE:

Table--1

UNIT: cd

C( DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	405	405	403	401	402	402	405	405	403	401	402	402							
5	403	402	401	401	400	400	404	404	402	401	401	400							
10	397	397	396	394	395	394	401	400	398	396	396	396							
15	389	388	387	386	386	386	394	392	390	389	388	388							
20	376	375	374	374	374	374	382	380	379	377	377	377							
25	361	360	359	358	358	359	369	366	365	363	363	363							
30	343	342	340	340	340	341	351	349	348	346	346	345							
35	321	320	318	318	319	319	331	328	328	326	326	325							
40	296	296	294	294	294	295	308	305	305	303	303	302							
45	269	268	267	267	267	269	281	280	279	278	277	276							
50	239	238	238	238	238	239	253	251	252	249	249	247							
55	207	207	205	207	207	208	222	221	221	219	219	217							
60	174	174	172	174	174	176	190	189	189	188	187	184							
65	140	139	139	140	141	142	156	155	156	154	154	151							
70	106	106	105	107	107	109	122	122	122	121	120	118							
75	73.0	72.8	72.3	74.2	74.5	76.1	88.0	88.1	88.7	87.9	86.9	85.1							
80	42.7	42.6	42.6	44.2	44.7	45.4	56.0	56.2	57.4	56.3	55.8	53.8							
85	15.7	15.7	16.1	17.5	17.9	18.1	27.3	27.4	28.6	27.4	27.2	25.6							
90	2.32	2.30	2.29	2.26	2.28	2.36	4.18	4.52	5.22	4.22	4.27	2.95							
95	2.45	2.44	2.43	2.42	2.43	2.47	1.59	1.60	1.58	1.55	1.58	1.55							
100	2.62	2.59	2.59	2.59	2.59	2.61	1.70	1.74	1.73	1.71	1.74	1.72							
105	2.78	2.76	2.75	2.77	2.75	2.75	1.90	1.91	1.91	1.91	1.91	1.90							
110	2.96	2.95	2.94	2.95	2.92	2.93	2.09	2.10	2.11	2.11	2.10	2.10							
115	3.14	3.12	3.12	3.12	3.11	3.11	2.30	2.31	2.31	2.31	2.30	2.30							
120	3.31	3.29	3.29	3.29	3.28	3.28	2.53	2.52	2.52	2.52	2.51	2.50							
125	3.47	3.46	3.45	3.45	3.44	3.43	2.75	2.75	2.74	2.73	2.73	2.72							
130	3.63	3.61	3.60	3.60	3.59	3.59	2.96	2.98	2.96	2.94	2.95	2.94							
135	3.79	3.79	3.78	3.77	3.75	3.75	3.20	3.21	3.19	3.17	3.17	3.19							
140	3.98	3.95	3.96	3.95	3.92	3.93	3.42	3.43	3.43	3.39	3.38	3.41							
145	4.15	4.13	4.12	4.10	4.09	4.09	3.63	3.62	3.64	3.60	3.58	3.63							
150	4.30	4.28	4.28	4.27	4.24	4.24	3.85	3.82	3.86	3.82	3.78	3.83							
155	4.42	4.40	4.40	4.40	4.36	4.38	4.07	4.02	4.09	4.05	3.97	4.04							
160	4.59	4.54	4.55	4.55	4.49	4.52	4.29	4.21	4.29	4.27	4.19	4.25							
165	4.72	4.68	4.68	4.69	4.65	4.66	4.49	4.40	4.49	4.47	4.38	4.43							
170	4.80	4.78	4.77	4.78	4.72	4.75	4.67	4.59	4.64	4.62	4.56	4.61							
175	4.90	4.83	4.84	4.84	4.79	4.83	4.81	4.72	4.77	4.76	4.70	4.74							
180	4.89	4.84	4.86	4.85	4.82	4.86	4.91	4.83	4.87	4.85	4.82	4.86							

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-03-02

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.269  
 Humidity:65.0%  
 Test Distance:6.400m [K=1.0000]  
 Remarks: