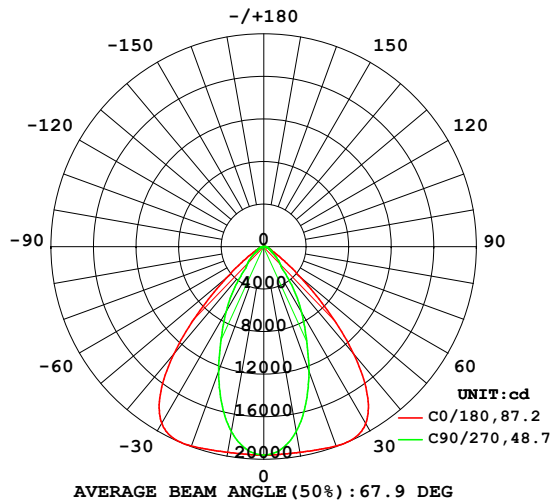


LUMINAIRE PHOTOMETRIC TEST REPORT

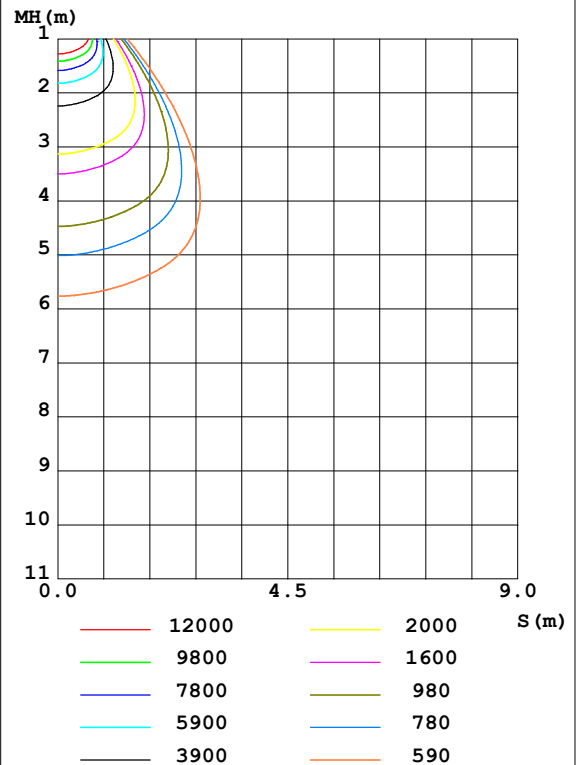
NAME: LHB01-150H	TYPE:150W	WEIGHT:
SPEC.:5000K Ra70 5090DEG L06402	DIM.: 1.178*0.137*0.102	SERIAL No.:
MFR.:	SUR.:1.17*0.1	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 161.09 lm/W			
MODEL	LHB01-150H	Imax(cd)	19992	S/MH(C0/180)	1.26
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	0.76
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	24442	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	24442.2	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	0.85

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [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	1959	1932	1909	1935	1959	1935	1909	1932	0- 5	465.3	465.3	1.9,1.9
10	1963	1853	1765	1859	1963	1859	1765	1853	5- 10	1357	1822	7.45,7.45
15	1976	1725	1529	1729	1976	1729	1529	1725	10- 15	2135	3957	16.2,16.2
20	1994	1538	1244	1538	1994	1538	1244	1538	15- 20	2732	6689	27.4,27.4
25	1994	1291	946.7	1287	1994	1287	946.7	1291	20- 25	3096	9784	40,40
30	1919	993.1	714.3	989.6	1919	989.6	714.3	993.1	25- 30	3198	12982	53.1,53.1
35	1699	718.9	490.3	715.0	1699	715.0	490.3	718.9	30- 35	3040	16022	65.6,65.6
40	1314	530.2	266.4	527.0	1314	527.0	266.4	530.2	35- 40	2595	18617	76.2,76.2
45	849.8	351.0	208.4	349.2	849.8	349.2	208.4	351.0	40- 45	1959	20575	84.2,84.2
50	459.5	186.6	150.4	185.7	459.5	185.7	150.4	186.6	45- 50	1353	21929	89.7,89.7
55	238.8	139.4	96.59	138.6	238.8	138.6	96.59	139.4	50- 55	872.0	22801	93.3,93.3
60	122.6	95.21	75.81	94.28	122.6	94.28	75.81	95.21	55- 60	560.8	23361	95.6,95.6
65	69.65	60.87	59.16	59.67	69.65	59.67	59.16	60.87	60- 65	381.6	23743	97.1,97.1
70	46.07	44.42	42.52	43.73	46.07	43.73	42.52	44.42	65- 70	272.7	24016	98.3,98.3
75	26.98	28.53	32.08	28.30	26.98	28.30	32.08	28.53	70- 75	193.4	24209	99,99
80	13.72	18.62	21.64	18.51	13.72	18.51	21.64	18.62	75- 80	129.9	24339	99.6,99.6
85	3.581	9.646	11.20	9.624	3.581	9.624	11.20	9.646	80- 85	75.91	24415	99.9,99.9
90	0.4028	0.7940	0.7667	0.8603	0.4028	0.8603	0.7667	0.7940	85- 90	27.35	24442	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 20575 lm

%lum = 84.2%

%lamp = 84.2%

Conical surface Flux(120deg): 23361 lm

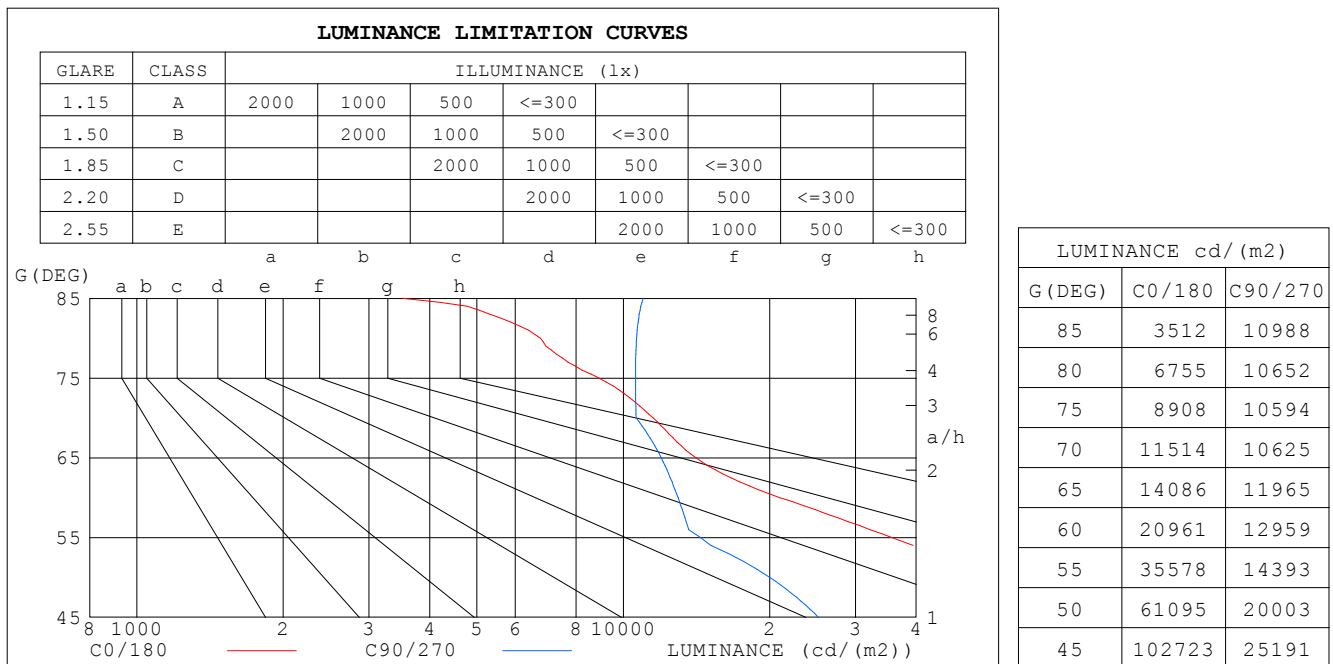
%lum = 95.6%

%lamp = 95.6%

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:9.500m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

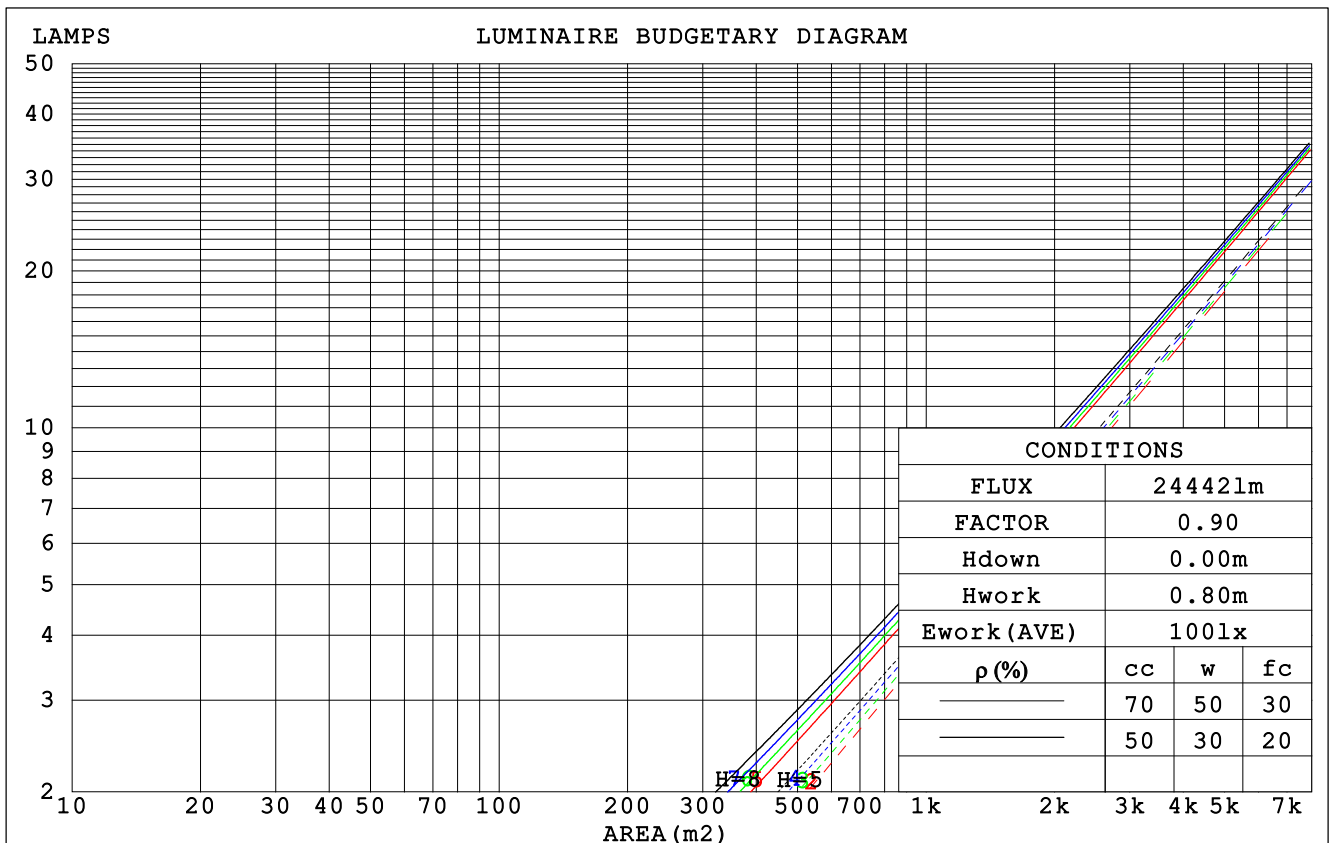


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 9.500m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.00	.98	.99	.97	.95	.95	.94	.93	.91
2.0	.99	.95	.90	.98	.93	.89	.94	.91	.87	.91	.88	.86	.88	.86	.84	.82
3.0	.91	.85	.80	.90	.84	.80	.87	.82	.78	.84	.80	.77	.82	.79	.76	.74
4.0	.84	.77	.72	.82	.76	.72	.80	.75	.71	.78	.73	.70	.76	.72	.69	.67
5.0	.77	.70	.65	.76	.70	.65	.74	.68	.64	.72	.67	.64	.71	.66	.63	.61
6.0	.71	.64	.59	.70	.64	.59	.69	.63	.59	.67	.62	.58	.66	.61	.58	.56
7.0	.66	.59	.54	.65	.59	.54	.64	.58	.54	.63	.57	.53	.62	.57	.53	.52
8.0	.62	.55	.50	.61	.54	.50	.60	.54	.50	.59	.53	.49	.58	.53	.49	.48
9.0	.58	.51	.46	.57	.51	.46	.56	.50	.46	.55	.50	.46	.54	.49	.46	.44
10.0	.54	.47	.43	.53	.47	.43	.53	.47	.43	.52	.46	.43	.51	.46	.42	.41



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 9.500m [K=1.0000]
 Remarks:

WEC AND CCEC

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	.214	.122	.039	.207	.118	.038	.194	.112	.036	.183	.105	.034	.172	.100	.032	
2.0	.206	.113	.035	.200	.110	.034	.189	.105	.033	.179	.100	.031	.170	.096	.030	
3.0	.195	.104	.031	.190	.102	.031	.181	.098	.030	.172	.094	.029	.164	.091	.028	
4.0	.185	.096	.028	.181	.095	.028	.172	.091	.027	.165	.088	.027	.158	.086	.026	
5.0	.175	.089	.026	.171	.088	.026	.164	.085	.025	.157	.083	.025	.151	.081	.024	
6.0	.166	.083	.024	.163	.082	.024	.156	.080	.023	.150	.078	.023	.145	.076	.023	
7.0	.158	.078	.022	.154	.077	.022	.149	.075	.022	.143	.074	.021	.138	.072	.021	
8.0	.150	.073	.021	.147	.072	.020	.142	.071	.020	.137	.069	.020	.132	.068	.020	
9.0	.142	.069	.019	.140	.068	.019	.135	.067	.019	.131	.066	.019	.127	.064	.019	
10.0	.136	.065	.018	.134	.065	.018	.129	.063	.018	.125	.062	.018	.122	.061	.018	

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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.094	.094	.079	.065	.054	.046	.038	.017	.015	.012	
3.0	.150	.114	.085	.129	.098	.074	.088	.068	.052	.051	.040	.030	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.133	.088	.055	.114	.076	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.126	.079	.046	.108	.069	.040	.075	.048	.028	.043	.028	.017	.014	.009	.006	
7.0	.120	.072	.039	.103	.063	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.114	.066	.033	.098	.057	.029	.068	.040	.021	.040	.024	.012	.013	.008	.004	
9.0	.109	.061	.029	.094	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.104	.057	.025	.090	.049	.022	.062	.035	.016	.036	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-06-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	25.3	26.4	25.5	26.6	26.8	19.6	20.8	19.9	21.0	21.1
3H	25.3	26.3	25.5	26.5	26.7	20.1	21.2	20.4	21.4	21.6
4H	25.2	26.2	25.5	26.5	26.7	20.4	21.4	20.7	21.6	21.9
6H	25.2	26.1	25.5	26.4	26.6	20.7	21.6	21.0	21.8	22.1
8H	25.2	26.1	25.5	26.3	26.6	20.8	21.7	21.1	21.9	22.2
12H	25.1	26.0	25.5	26.3	26.5	20.9	21.7	21.2	22.0	22.3
4H 2H	25.1	26.1	25.4	26.3	26.5	19.9	20.9	20.2	21.1	21.4
3H	25.2	26.0	25.5	26.3	26.6	20.6	21.4	20.9	21.7	22.0
4H	25.2	26.0	25.5	26.3	26.6	20.9	21.7	21.3	22.0	22.3
6H	25.2	25.9	25.6	26.2	26.6	21.3	22.0	21.7	22.3	22.7
8H	25.2	25.8	25.6	26.2	26.5	21.5	22.1	21.9	22.5	22.8
12H	25.1	25.7	25.6	26.1	26.5	21.6	22.2	22.0	22.6	23.0
8H 4H	25.1	25.7	25.5	26.1	26.5	21.0	21.6	21.4	22.0	22.4
6H	25.2	25.7	25.6	26.1	26.5	21.5	22.0	22.0	22.4	22.9
8H	25.2	25.6	25.6	26.0	26.5	21.8	22.2	22.2	22.6	23.1
12H	25.2	25.6	25.6	26.0	26.5	22.0	22.4	22.5	22.8	23.3
12H 4H	25.1	25.7	25.5	26.0	26.4	21.0	21.6	21.4	22.0	22.3
6H	25.1	25.6	25.6	26.0	26.5	21.5	22.0	22.0	22.4	22.9
8H	25.2	25.5	25.6	26.0	26.5	21.8	22.2	22.3	22.7	23.1
Variations with the observer position at spacings:										
S = 1.0H	+ 2.8 / - 3.1					+ 0.9 / - 1.1				
1.5H	+ 3.8 / - 3.6					+ 0.9 / - 0.9				
2.0H	+ 5.4 / - 3.6					+ 1.0 / - 0.8				

CIE Pub.117 Corrected 24442 lm Total Lamp Luminous Flux.(8log(F/F0) = 11.1)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-06-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

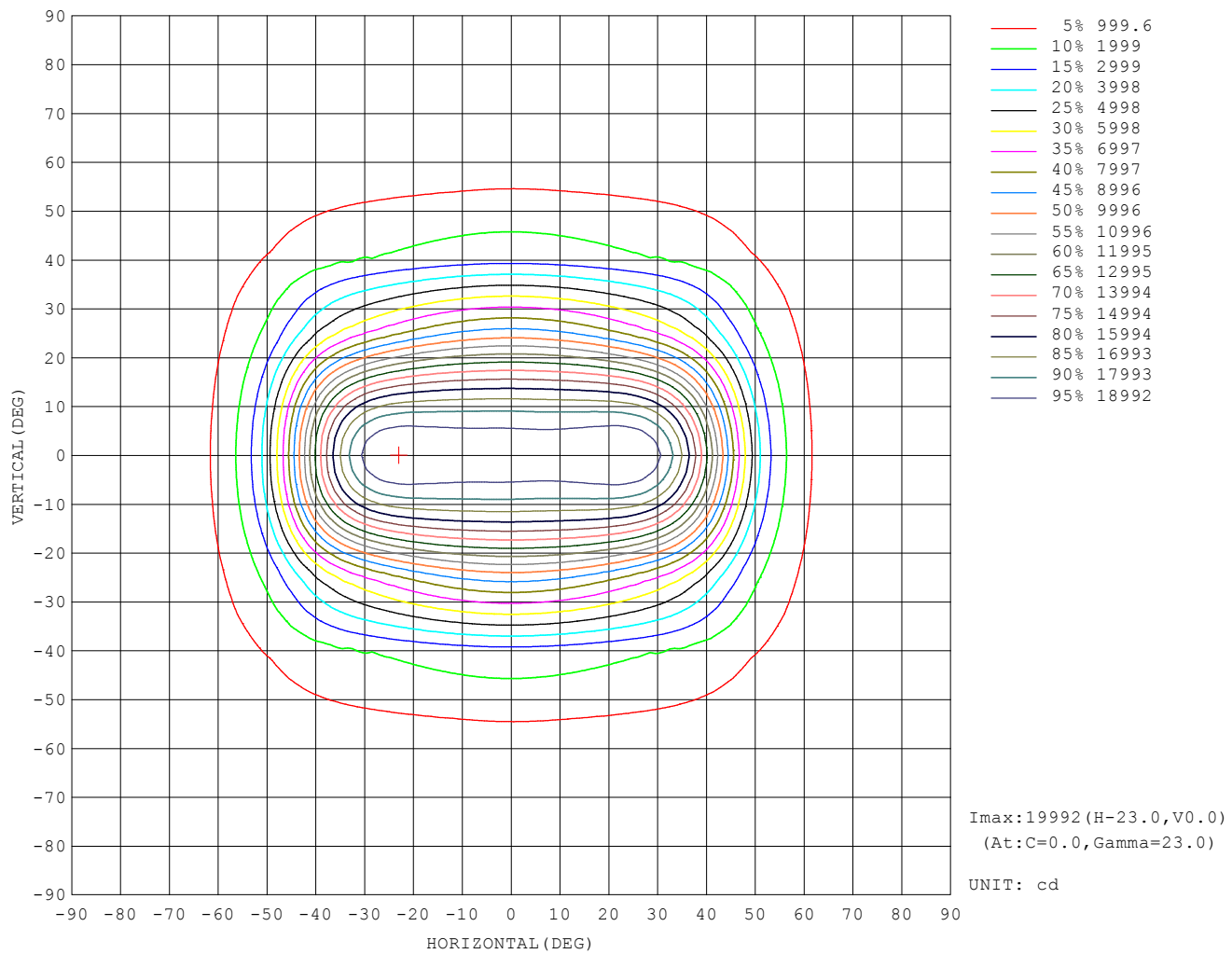
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	77	68	63	76	68	63	75	68	63	58
0.80	85	78	73	85	77	72	83	76	72	67
1.00	92	84	80	91	84	79	89	84	79	74
1.25	97	90	86	96	90	85	94	88	84	79
1.50	101	94	90	99	93	89	97	92	88	83
2.00	105	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	105	101	107	103	100	104	100	98	91
4.00	112	108	105	109	106	104	106	103	101	93
5.00	113	110	107	111	108	106	107	105	103	95
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: 2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 9.500m [K=1.0000]
Remarks:

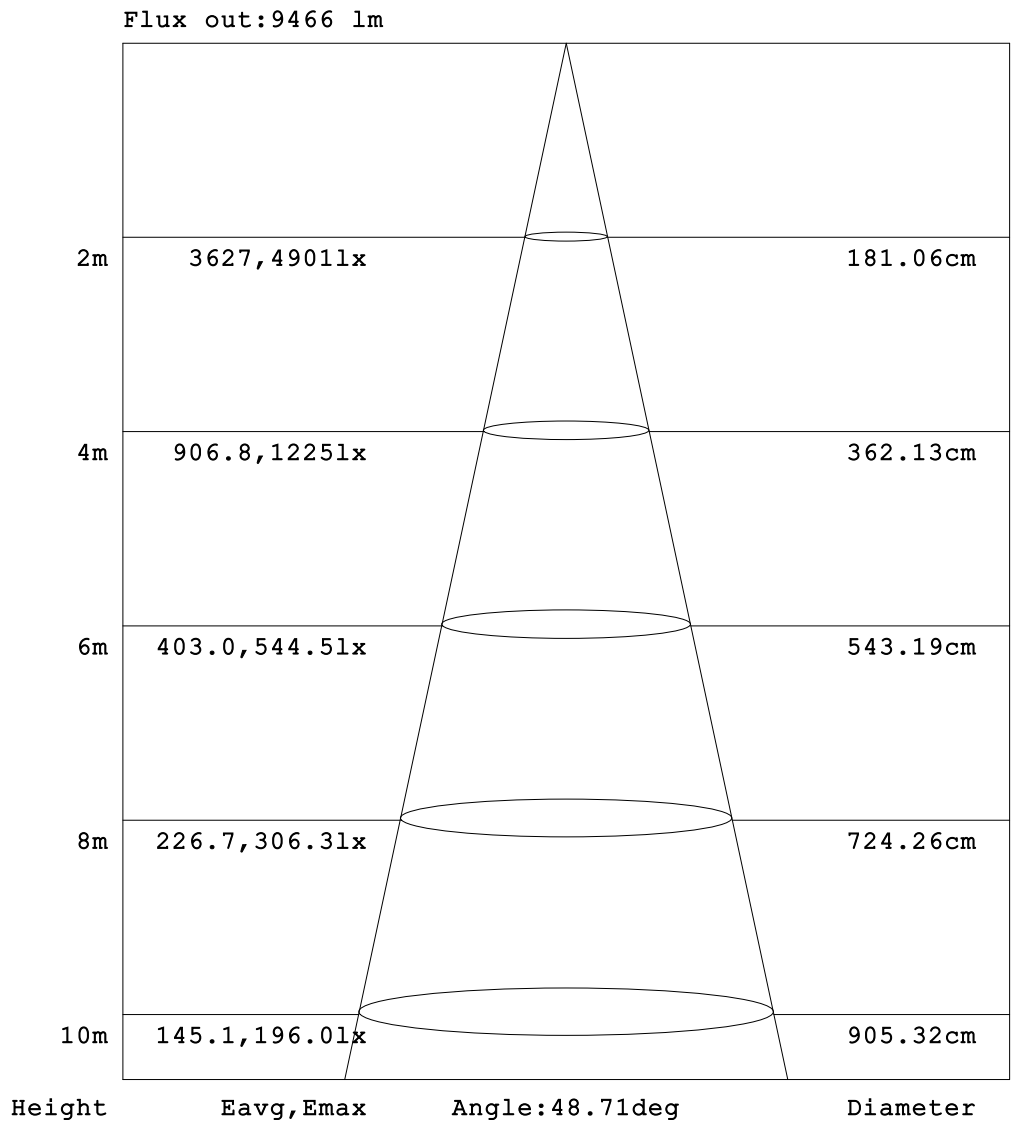
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

AAI Figure

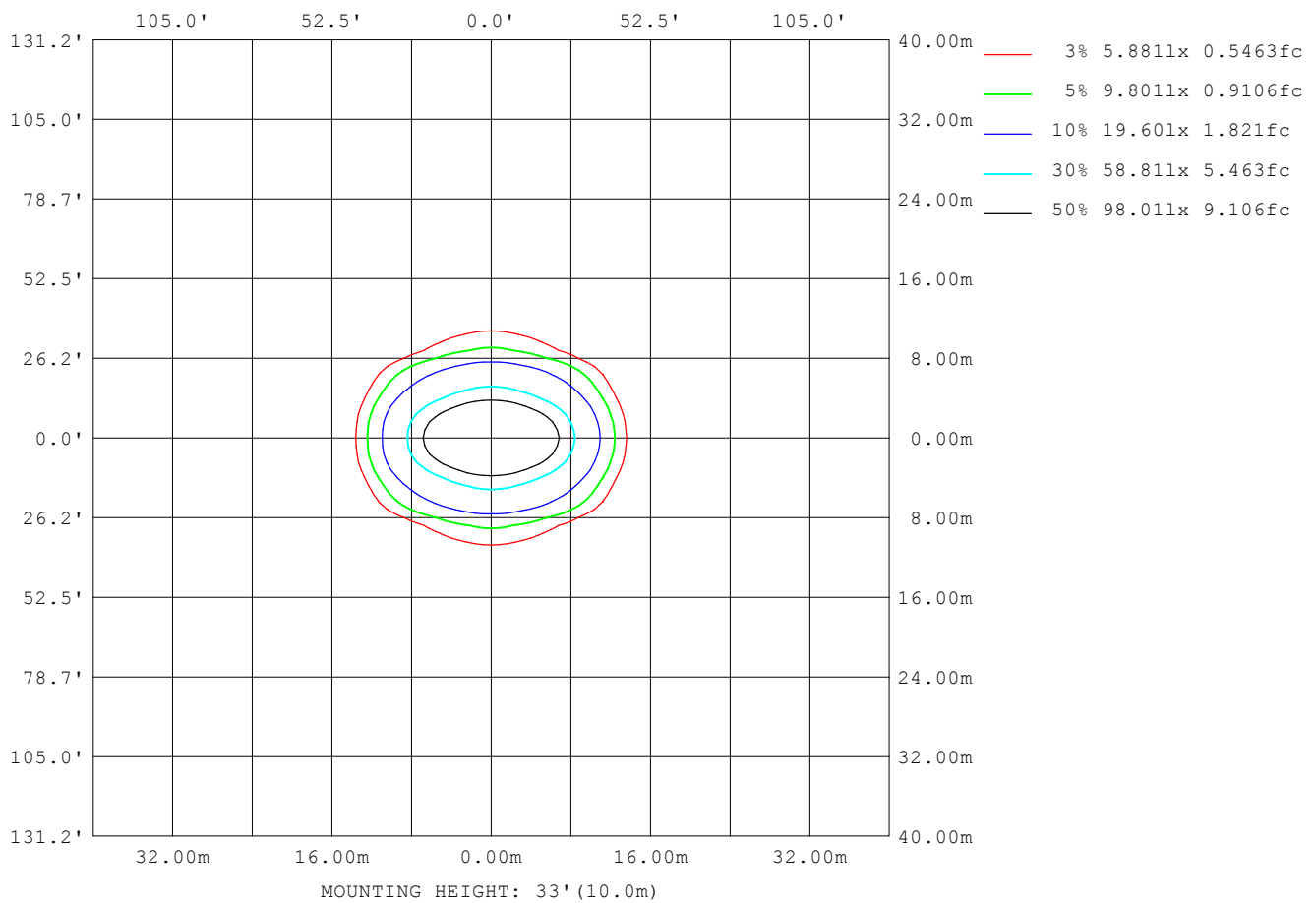


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 9.500m [K=1.0000]
Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2017-06-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 9.500m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: LHB01-150H	TYPE:150W	WEIGHT:
SPEC.:5000K Ra70 5090DEG L06402	DIM.: 1.178*0.137*0.102	SERIAL No.:
MFR.:	SUR.:1.17*0.1	Shielding Angle:

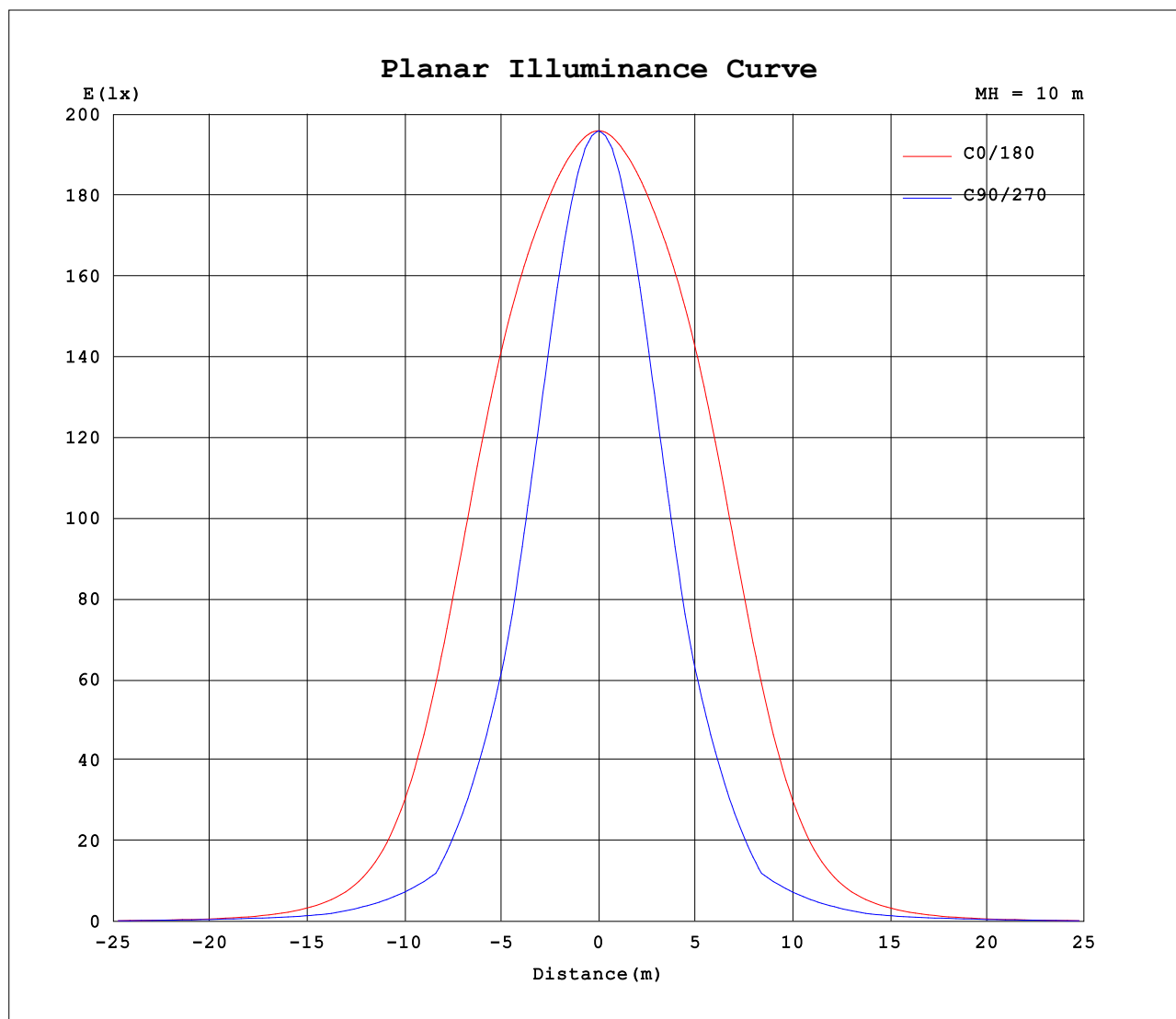
AvgL	cd/m2
L_0~180 (65) av	14086
L_0~180 (75) av	8908
L_0~180 (85) av	3512
L_90~270 (65) av	11965
L_90~270 (75) av	10594
L_90~270 (85) av	10988
L_45 (65) av	12189
L_45 (75) av	9383
L_45 (85) av	9449

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-06-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2017-06-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 9.500m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

```