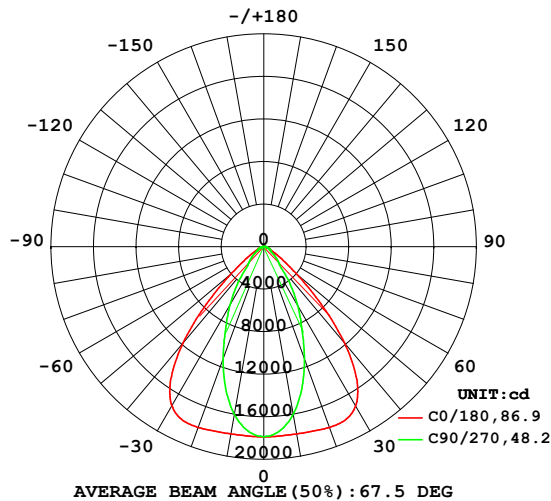


LUMINAIRE PHOTOMETRIC TEST REPORT

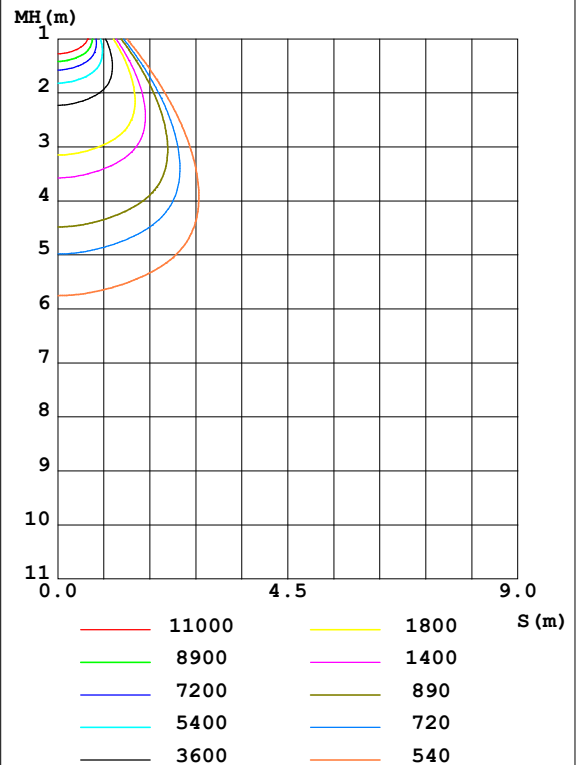
NAME: LHB01-150H	TYPE:150W	WEIGHT:
SPEC.:4000K Ra80 5090DEG L06402	DIM.: 1.178*0.137*0.102	SERIAL No.:
MFR.:	SUR.:1.17*0.1	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 147.15 lm/W			
MODEL	LHB01-150H	Imax(cd)	18103	S/MH(C0/180)	1.25
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	0.75
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	22039	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	22039.1	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
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	1786	1759	1738	1759	1786	1763	1738	1763	0- 5	424.0	424.0	1.92,1.92
10	1787	1682	1601	1682	1787	1689	1601	1689	5- 10	1234	1658	7.52,7.52
15	1797	1561	1383	1561	1797	1567	1383	1567	10- 15	1937	3595	16.3,16.3
20	1808	1389	1120	1389	1808	1390	1120	1390	15- 20	2472	6067	27.5,27.5
25	1802	1162	850.7	1162	1802	1159	850.7	1159	20- 25	2794	8861	40.2,40.2
30	1728	891.8	641.6	891.8	1728	887.3	641.6	887.3	25- 30	2878	11740	53.3,53.3
35	1526	645.1	440.2	645.1	1526	640.4	440.2	640.4	30- 35	2729	14469	65.7,65.7
40	1180	475.4	238.8	475.4	1180	471.8	238.8	471.8	35- 40	2325	16794	76.2,76.2
45	764.7	314.5	187.2	314.5	764.7	312.5	187.2	312.5	40- 45	1755	18549	84.2,84.2
50	412.6	167.3	135.6	167.3	412.6	166.4	135.6	166.4	45- 50	1214	19763	89.7,89.7
55	214.0	125.3	87.65	125.3	214.0	124.5	87.65	124.5	50- 55	783.0	20546	93.2,93.2
60	110.9	86.04	69.05	86.04	110.9	85.13	69.05	85.13	55- 60	506.1	21052	95.5,95.5
65	63.40	55.35	54.12	55.35	63.40	54.42	54.12	54.42	60- 65	346.4	21399	97.1,97.1
70	42.09	40.50	39.19	40.50	42.09	40.01	39.19	40.01	65- 70	248.8	21647	98.2,98.2
75	24.65	26.15	29.58	26.15	24.65	26.10	29.58	26.10	70- 75	177.3	21825	99,99
80	12.36	17.08	19.97	17.08	12.36	17.11	19.97	17.11	75- 80	119.3	21944	99.6,99.6
85	3.329	8.850	10.36	8.850	3.329	8.901	10.36	8.901	80- 85	69.83	22014	99.9,99.9
90	0.3943	0.7303	0.7448	0.7303	0.3943	0.7958	0.7448	0.7958	85- 90	25.28	22039	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): 18549 lm

%lum = 84.2%

%lamp = 84.2%

Conical surface Flux(120deg): 21052 lm

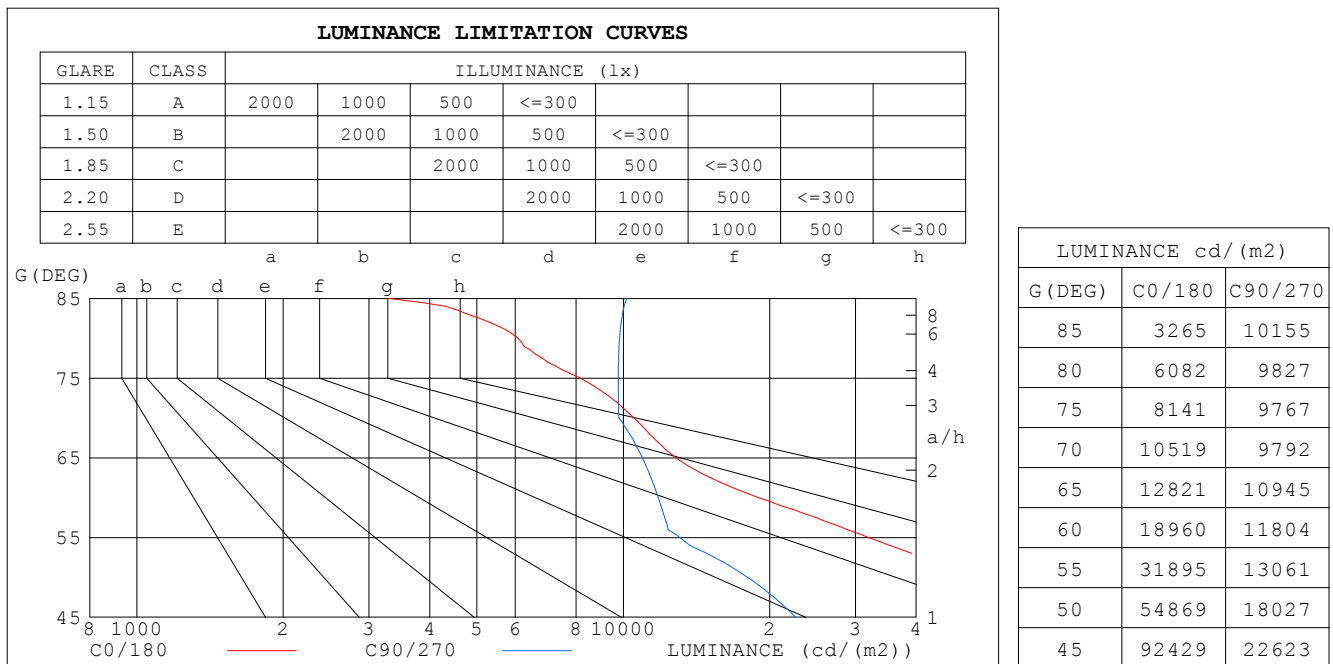
%lum = 95.5%

%lamp = 95.5%

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

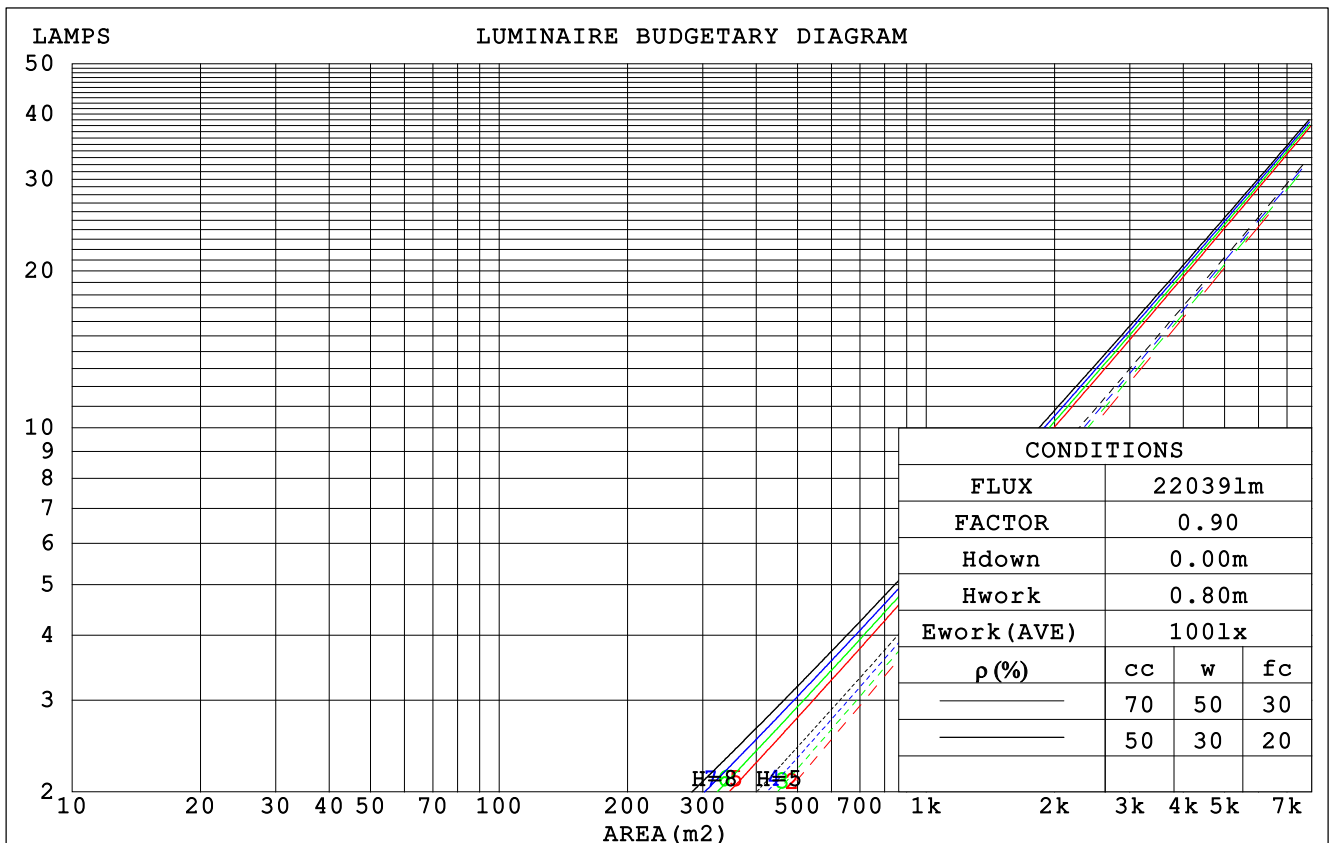


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2017-06-02

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

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.00
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	.69	.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	.54	.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	.094	.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	.162	.082	.024	.156	.080	.023	.150	.078	.023	.144	.076	.023	
7.0	.157	.078	.022	.154	.077	.022	.149	.075	.022	.143	.073	.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	.133	.064	.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	24.9	26.0	25.1	26.2	26.4	19.3	20.4	19.5	20.6	20.8
3H	24.9	25.9	25.2	26.2	26.4	19.8	20.8	20.1	21.1	21.3
4H	24.9	25.9	25.2	26.1	26.3	20.1	21.1	20.4	21.3	21.5
6H	24.8	25.8	25.1	26.0	26.3	20.4	21.3	20.7	21.5	21.8
8H	24.8	25.7	25.1	26.0	26.2	20.5	21.4	20.8	21.6	21.9
12H	24.8	25.6	25.1	25.9	26.2	20.6	21.4	20.9	21.7	22.0
4H 2H	24.7	25.7	25.0	25.9	26.2	19.5	20.5	19.8	20.8	21.0
3H	24.8	25.6	25.1	25.9	26.2	20.2	21.1	20.6	21.4	21.6
4H	24.8	25.6	25.2	25.9	26.2	20.6	21.4	21.0	21.7	22.0
6H	24.8	25.5	25.2	25.9	26.2	21.0	21.7	21.4	22.0	22.4
8H	24.8	25.4	25.2	25.8	26.2	21.2	21.8	21.6	22.2	22.6
12H	24.8	25.4	25.2	25.7	26.1	21.3	21.9	21.8	22.3	22.7
8H 4H	24.8	25.4	25.2	25.7	26.1	20.7	21.3	21.1	21.7	22.1
6H	24.8	25.3	25.2	25.7	26.1	21.2	21.7	21.7	22.1	22.6
8H	24.8	25.3	25.3	25.7	26.1	21.5	21.9	21.9	22.4	22.8
12H	24.8	25.2	25.3	25.6	26.1	21.7	22.1	22.2	22.6	23.0
12H 4H	24.7	25.3	25.1	25.7	26.1	20.7	21.3	21.1	21.6	22.0
6H	24.8	25.2	25.2	25.7	26.1	21.2	21.7	21.7	22.1	22.6
8H	24.8	25.2	25.3	25.6	26.1	21.5	21.9	22.0	22.4	22.8
Variations with the observer position at spacings:										
S = 1.0H	+ 2.8 / - 3.0					+ 0.8 / - 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 22039 lm Total Lamp Luminous Flux.(8log(F/F0) = 10.7)

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:

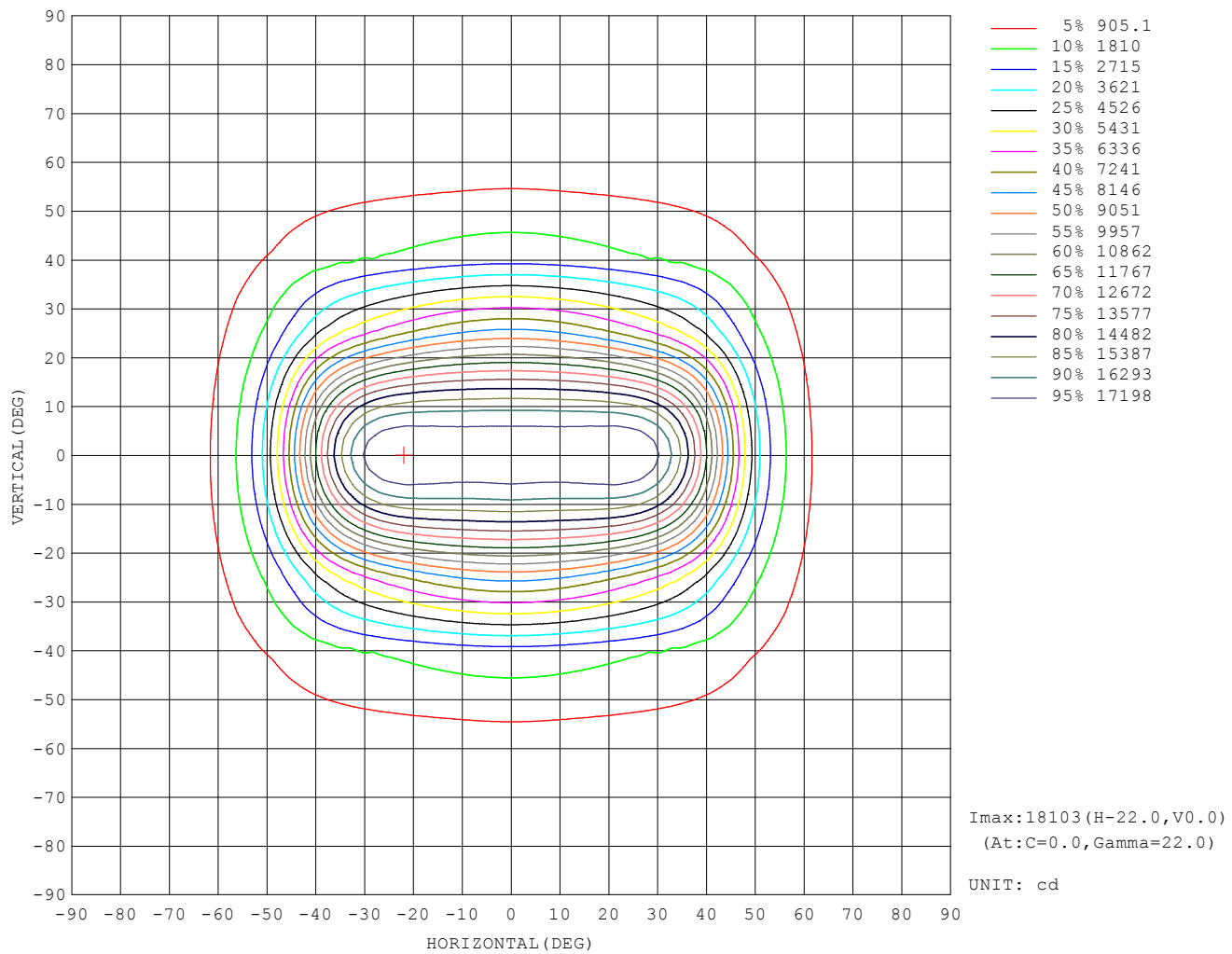
UTILIZATION FACTORS TABLE

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	77	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:

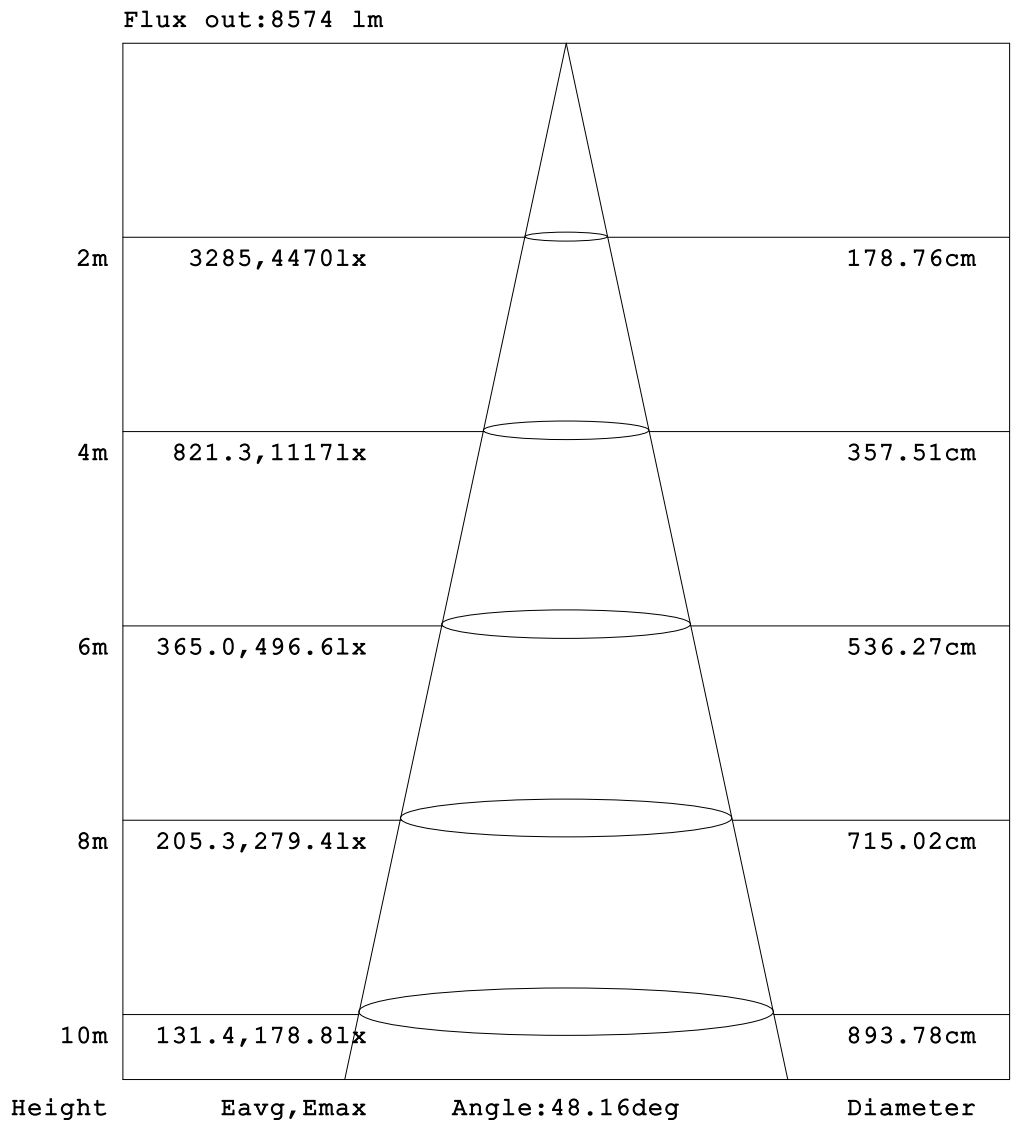
ISOCANDELA DIAGRAM



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

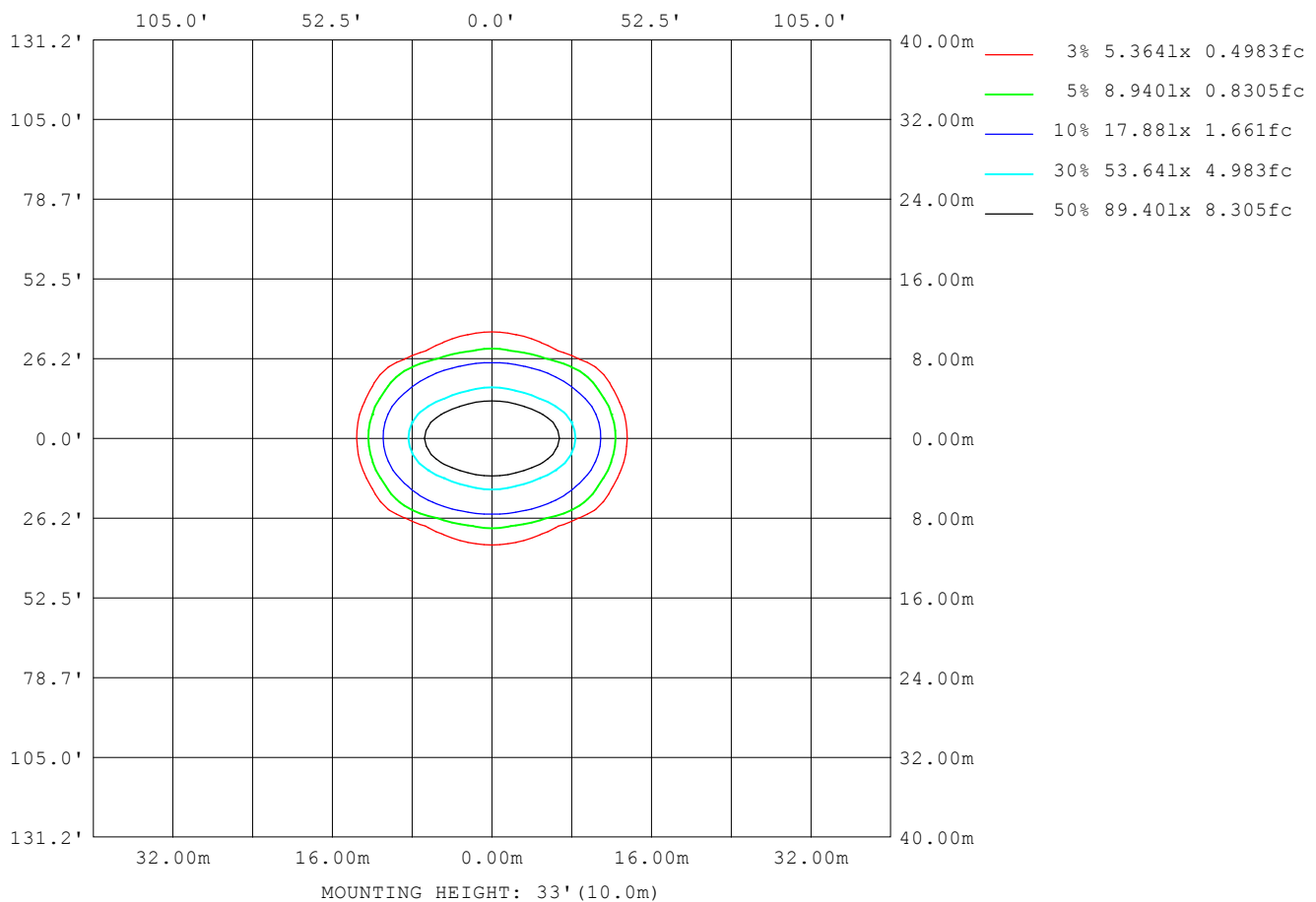


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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.:4000K Ra80 5090DEG L06402	DIM.: 1.178*0.137*0.102	SERIAL No.:
MFR.:	SUR.:1.17*0.1	Shielding Angle:

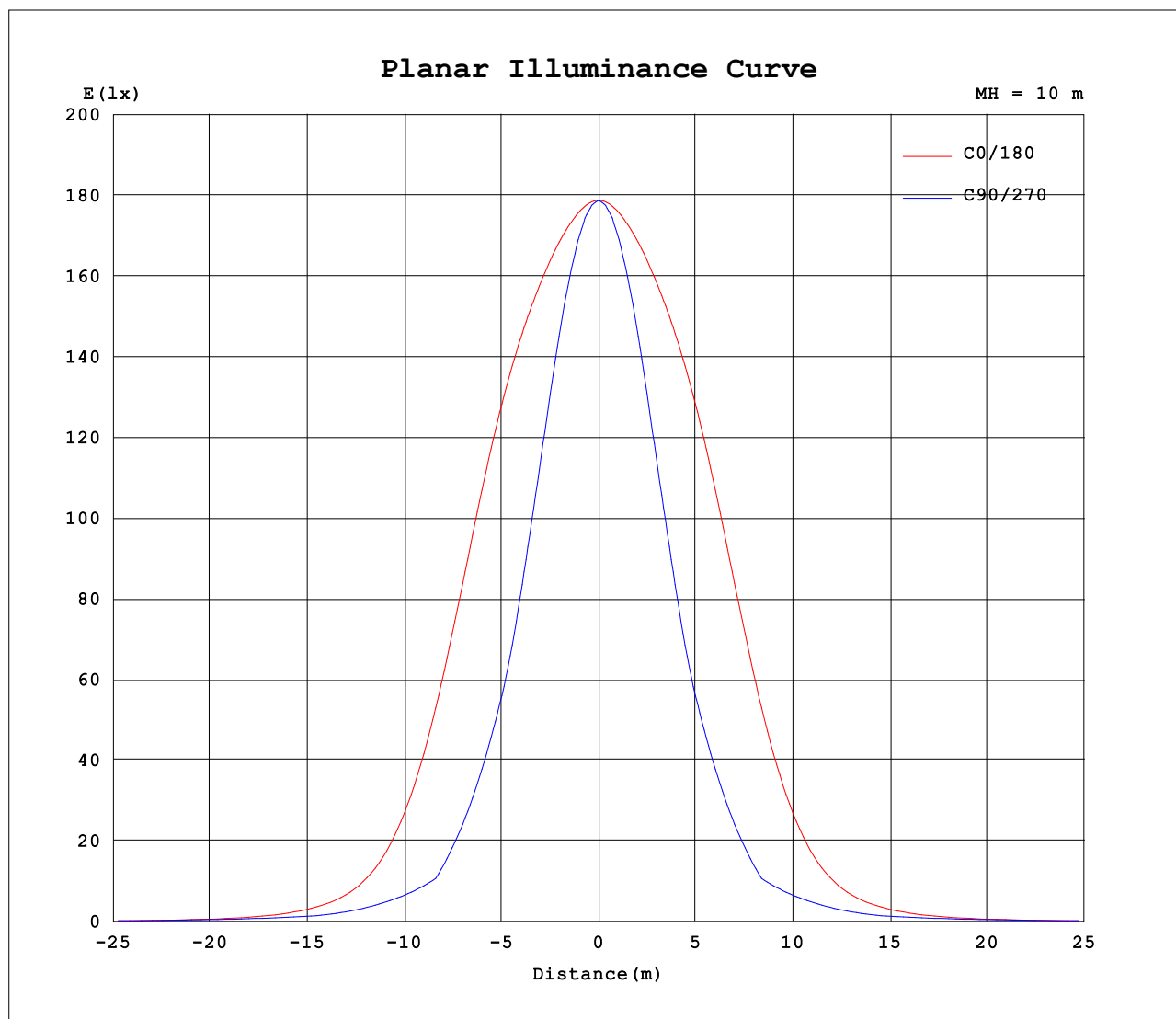
AvgL	cd/m2
L_0~180 (65) av	12821
L_0~180 (75) av	8141
L_0~180 (85) av	3265
L_90~270 (65) av	10945
L_90~270 (75) av	9767
L_90~270 (85) av	10155
L_45 (65) av	11099
L_45 (75) av	8627
L_45 (85) av	8704

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:

```

```

Range: 0 - 90DEG
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:

```

```

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

```