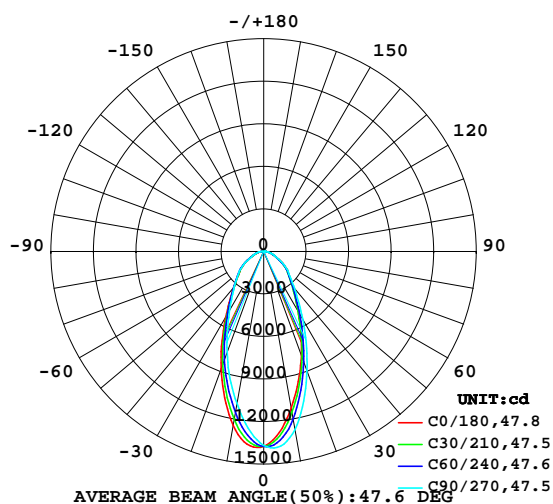


LUMINAIRE PHOTOMETRIC TEST REPORT

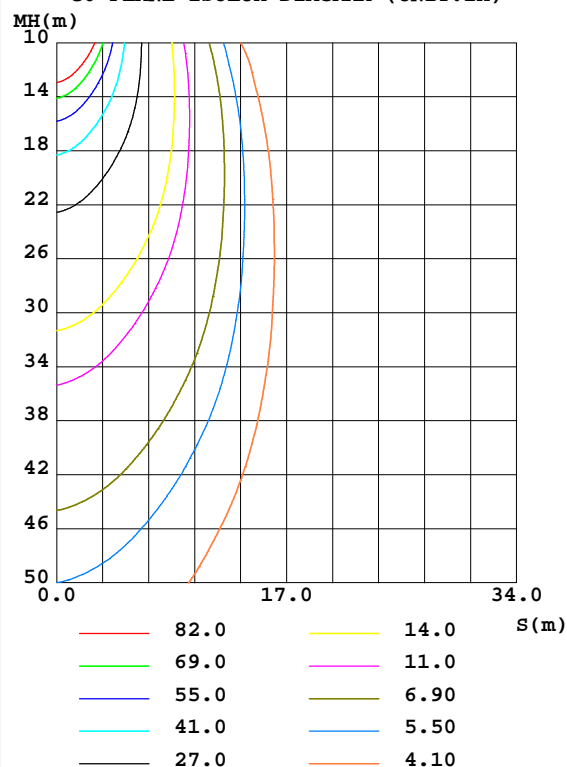
Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 #2 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 #2 DIM.	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.82 lm/W			
MODEL	사출 Lens_190308 #2	Imax(cd)	13902	S/MH(C0/180)	0.77
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	0.67
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	15361	η UP,DN(C0-180)	0.9,49.8
NOMINAL FLUX(lm)	15361.5	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.7,48.7
LAMPS INSIDE	1	η up(%)	1.6	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	98.4	CIBSE SHR MAX	0.85

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1120	1175	1275	1281	1246	1175	1090	1086	0- 10	1213	1213	7.9,7.9
20	778.2	807.9	895.3	905.6	879.2	828.9	756.6	760.4	10- 20	2794	4007	26.1,26.1
30	488.1	497.1	550.9	556.4	540.2	514.3	484.1	489.1	20- 30	3016	7023	45.7,45.7
40	320.7	314.4	338.1	336.8	328.9	327.2	323.0	328.7	30- 40	2553	9577	62.3,62.3
50	226.4	220.4	227.9	225.3	221.8	225.9	227.7	231.4	40- 50	2084	11660	75.9,75.9
60	142.5	136.0	142.4	140.1	139.6	144.6	141.0	144.9	50- 60	1647	13307	86.6,86.6
70	76.65	74.18	77.02	75.39	74.94	76.97	76.70	78.35	60- 70	1025	14332	93.3,93.3
80	36.02	33.84	36.48	34.28	34.35	38.52	38.82	38.58	70- 80	588.1	14920	97.1,97.1
90	3.805	2.841	7.406	3.883	3.253	4.670	6.849	3.958	80- 90	202.5	15123	98.4,98.4
100	2.127	2.129	2.076	2.086	1.215	1.170	1.186	1.195	90-100	23.13	15146	98.6,98.6
110	2.863	3.011	3.054	2.958	1.683	1.783	1.970	1.844	100-110	21.06	15167	98.7,98.7
120	3.865	4.000	4.077	3.913	2.410	2.542	2.861	2.658	110-120	28.04	15195	98.9,98.9
130	5.034	5.016	5.098	4.900	3.431	3.493	3.880	3.656	120-130	34.03	15229	99.1,99.1
140	6.137	6.064	6.108	5.963	4.715	4.661	5.021	4.835	130-140	37.78	15267	99.4,99.4
150	6.825	6.876	6.838	6.796	5.824	5.798	5.942	5.898	140-150	37.14	15304	99.6,99.6
160	7.153	7.229	7.269	7.267	6.639	6.575	6.580	6.519	150-160	30.75	15335	99.8,99.8
170	7.234	7.292	7.354	7.367	7.085	6.999	6.917	6.862	160-170	19.95	15355	100,100
180	7.298	7.336	7.277	7.300	7.298	7.336	7.277	7.301	170-180	6.858	15361	100,100
DEG	LUMINOUS INTENSITY:≠10cd									UNIT:lm		

Conical surface Flux(90deg): 10671 lm

%lum = 69.5%

%lamp = 69.5%

Conical surface Flux(120deg): 13307 lm

%lum = 86.6%

%lamp = 86.6%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

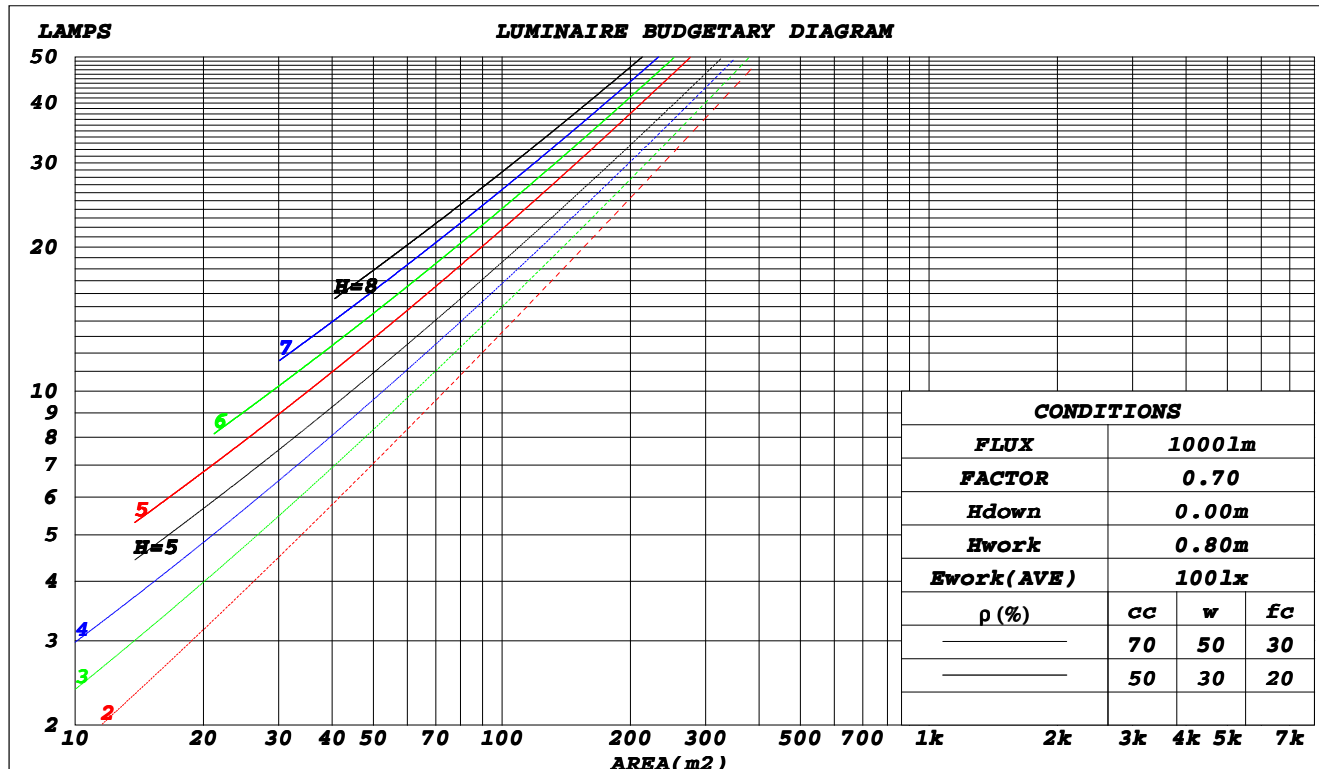
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens 19

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

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	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.98
1.0	1.06	1.03	.00	1.04	1.01	.98	.00	.97	.95	.96	.93	.91	.92	.90	.89	.86
2.0	.96	.90	.85	.94	.88	.84	.90	.86	.82	.87	.83	.80	.83	.81	.78	.76
3.0	.86	.79	.74	.85	.78	.73	.82	.76	.72	.79	.74	.71	.76	.72	.69	.67
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.72	.67	.63	.70	.66	.62	.60
5.0	.72	.64	.59	.71	.64	.58	.69	.62	.57	.66	.61	.57	.65	.60	.56	.54
6.0	.66	.58	.53	.65	.58	.53	.63	.57	.52	.62	.56	.52	.60	.55	.51	.49
7.0	.61	.54	.48	.60	.53	.48	.59	.52	.48	.57	.52	.47	.56	.51	.47	.45
8.0	.57	.49	.44	.56	.49	.44	.55	.48	.44	.53	.48	.44	.52	.47	.43	.42
9.0	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.44	.40	.49	.44	.40	.39
10.0	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.46	.41	.37	.36



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

WEC AND CCEC

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.254	.144	.046	.246	.141	.045	.233	.133	.043	.220	.127	.041	.208	.121	.039		
2.0	.239	.131	.040	.233	.128	.040	.221	.123	.038	.210	.118	.037	.199	.113	.036		
3.0	.223	.119	.036	.218	.117	.035	.207	.112	.034	.197	.108	.033	.188	.104	.032		
4.0	.208	.108	.032	.203	.106	.031	.194	.103	.031	.185	.099	.030	.177	.096	.029		
5.0	.194	.099	.029	.190	.097	.028	.181	.094	.028	.174	.092	.027	.167	.089	.027		
6.0	.181	.091	.026	.178	.090	.026	.170	.087	.025	.163	.085	.025	.157	.083	.025		
7.0	.170	.084	.024	.167	.083	.024	.160	.081	.023	.154	.079	.023	.148	.077	.023		
8.0	.160	.078	.022	.157	.077	.022	.151	.076	.022	.146	.074	.021	.141	.072	.021		
9.0	.151	.073	.020	.148	.072	.020	.143	.071	.020	.138	.069	.020	.133	.068	.020		
10.0	.143	.069	.019	.141	.068	.019	.136	.067	.019	.131	.065	.019	.127	.064	.018		

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						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022		
1.0	.188	.169	.151	.161	.145	.130	.110	.100	.090	.063	.058	.052	.020	.019	.017		
2.0	.177	.144	.116	.152	.124	.101	.104	.086	.070	.060	.050	.041	.019	.016	.013		
3.0	.168	.126	.093	.144	.109	.081	.099	.076	.057	.057	.044	.033	.018	.014	.011		
4.0	.159	.112	.077	.136	.097	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009		
5.0	.151	.101	.065	.130	.088	.056	.089	.061	.040	.052	.036	.024	.017	.012	.008		
6.0	.144	.093	.056	.123	.080	.049	.085	.056	.034	.049	.033	.021	.016	.011	.007		
7.0	.137	.085	.049	.118	.074	.043	.081	.052	.030	.047	.031	.018	.015	.010	.006		
8.0	.131	.079	.044	.113	.069	.039	.078	.048	.027	.045	.029	.016	.015	.009	.005		
9.0	.125	.074	.040	.108	.065	.035	.075	.045	.025	.043	.027	.015	.014	.009	.005		
10.0	.120	.070	.037	.103	.061	.032	.072	.043	.023	.042	.025	.014	.014	.008	.005		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

UGR(Unified Glare Rating) Table

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm											
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED						WEIGHT:					
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:						SERIAL No.:					
MFR.: ICEPIPE						SUR.:		Shielding 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	23.4	24.6	23.6	24.8	25.0	23.4	24.7	23.7	24.9	25.1	
	3H	24.3	25.5	24.6	25.7	26.0	24.4	25.5	24.7	25.8	26.0
	4H	24.8	25.9	25.1	26.2	26.4	24.8	25.9	25.2	26.2	26.5
	6H	25.2	26.2	25.5	26.5	26.8	25.2	26.3	25.6	26.5	26.8
	8H	25.3	26.3	25.7	26.6	26.9	25.4	26.4	25.7	26.7	27.0
12H	25.4	26.4	25.8	26.7	27.0	25.5	26.5	25.9	26.8	27.1	
4H	2H	23.7	24.8	24.1	25.1	25.4	23.8	24.9	24.1	25.1	25.4
	3H	24.9	25.9	25.3	26.2	26.5	24.9	25.9	25.3	26.2	26.5
	4H	25.5	26.4	25.9	26.7	27.1	25.5	26.4	25.9	26.7	27.1
	6H	26.0	26.8	26.4	27.2	27.6	26.1	26.8	26.5	27.2	27.6
	8H	26.2	27.0	26.7	27.3	27.8	26.3	27.0	26.7	27.4	27.8
12H	26.4	27.1	26.8	27.5	27.9	26.5	27.1	26.9	27.5	28.0	
8H	4H	25.7	26.4	26.1	26.8	27.2	25.7	26.4	26.1	26.8	27.2
	6H	26.4	27.0	26.8	27.4	27.8	26.4	27.0	26.8	27.4	27.9
	8H	26.7	27.2	27.1	27.6	28.1	26.7	27.2	27.2	27.7	28.1
	12H	26.9	27.4	27.4	27.8	28.3	27.0	27.4	27.5	27.9	28.4
	12H	4H	25.7	26.4	26.1	26.8	27.2	25.7	26.4	26.2	26.8
6H	26.4	26.9	26.9	27.4	27.9	26.4	27.0	26.9	27.4	27.9	
8H	26.8	27.2	27.3	27.7	28.2	26.8	27.2	27.3	27.7	28.2	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.5 / - 0.5					+ 0.5 / - 0.5					

CIE Pub.117 Corrected 15361 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.5)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

UTILIZATION FACTORS TABLE

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

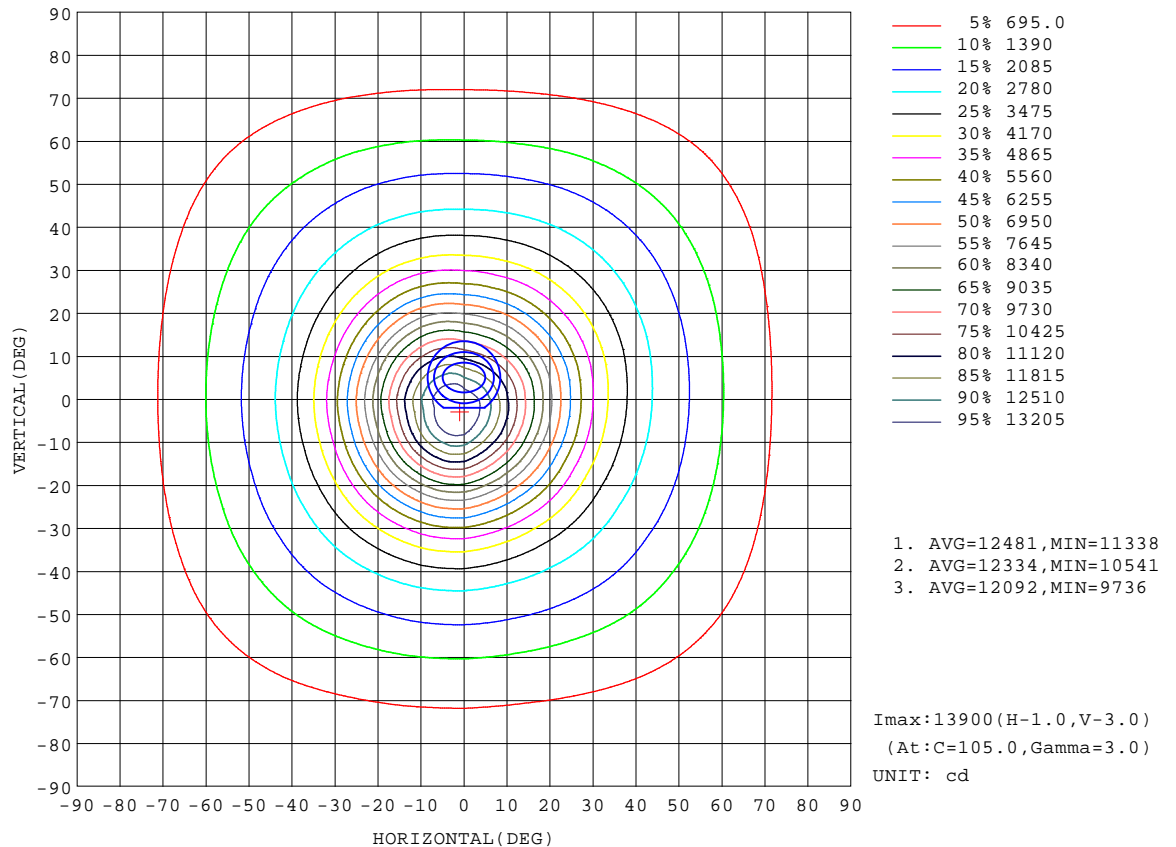
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	58	53	67	58	53	66	58	52	47
0.80	77	68	62	76	67	62	75	67	61	56
1.00	85	76	70	83	75	69	81	76	69	63
1.25	91	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	81	90	84	79	73
2.00	100	93	88	98	92	87	95	90	85	78
2.50	103	97	92	101	95	91	97	92	89	81
3.00	106	100	96	103	98	94	99	95	92	84
4.00	109	104	100	106	102	99	102	99	96	87
5.00	111	107	103	108	105	102	104	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

ISOCANDELA DIAGRAM

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

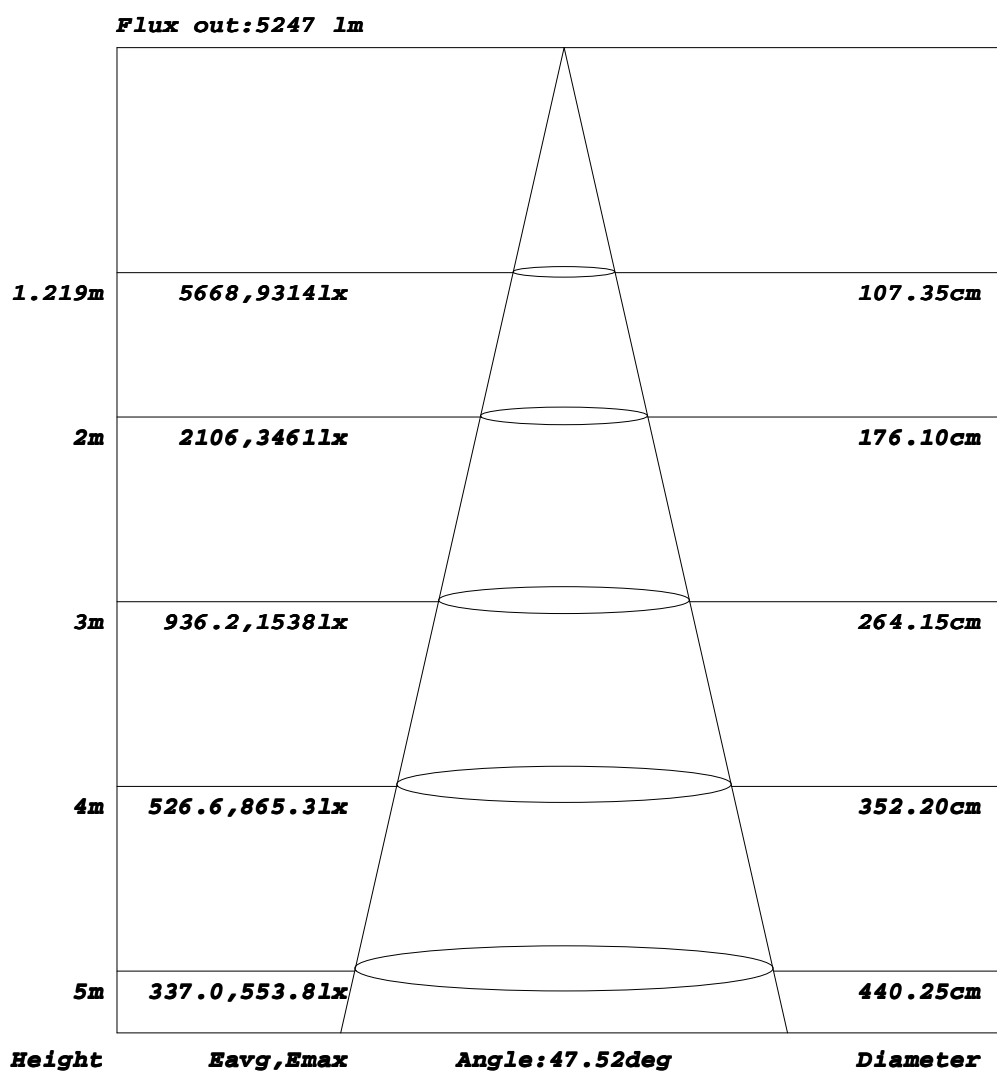


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

AAI Figure

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:



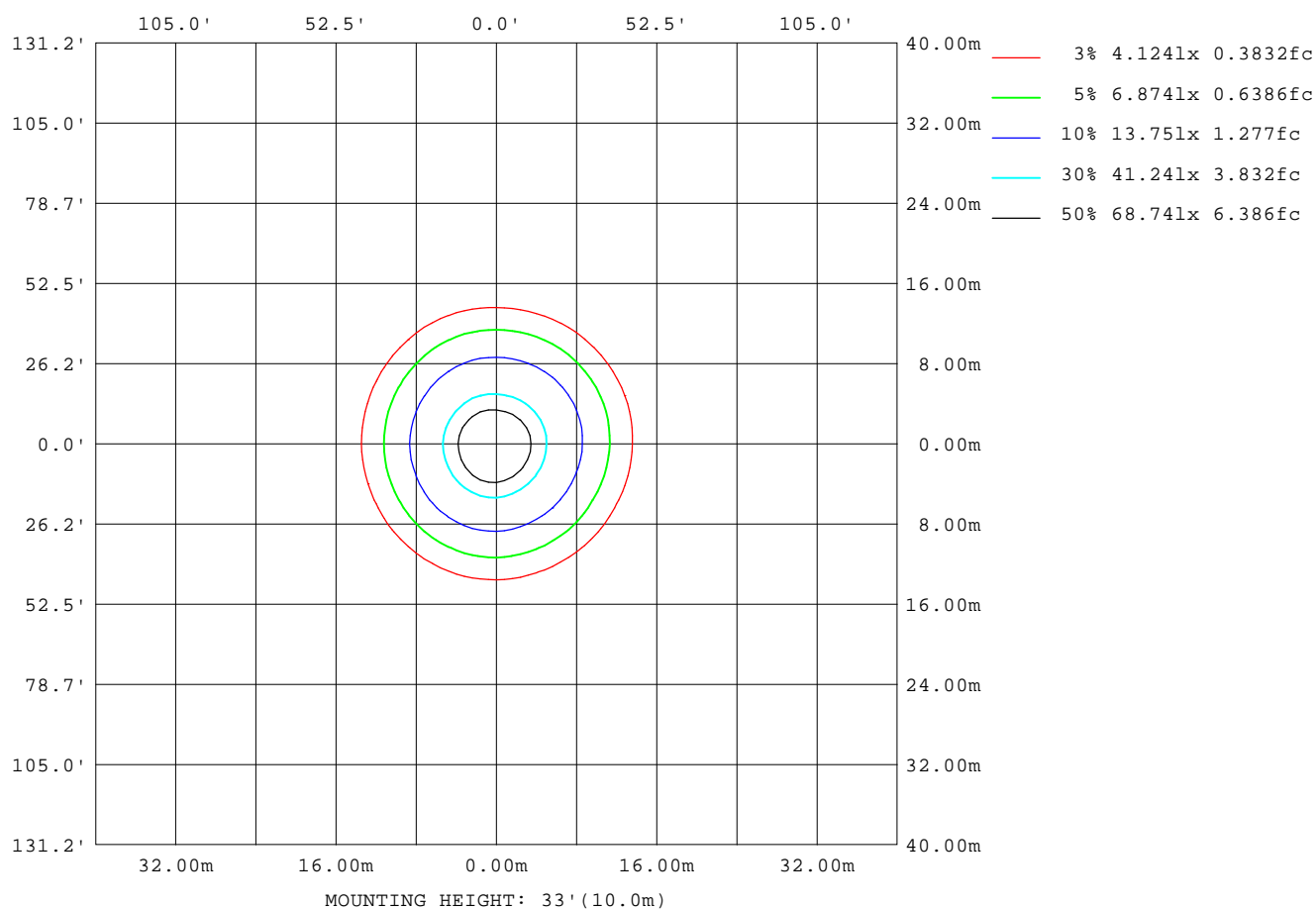
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

ISOLUX DIAGRAM

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

LED Avg.L Report

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

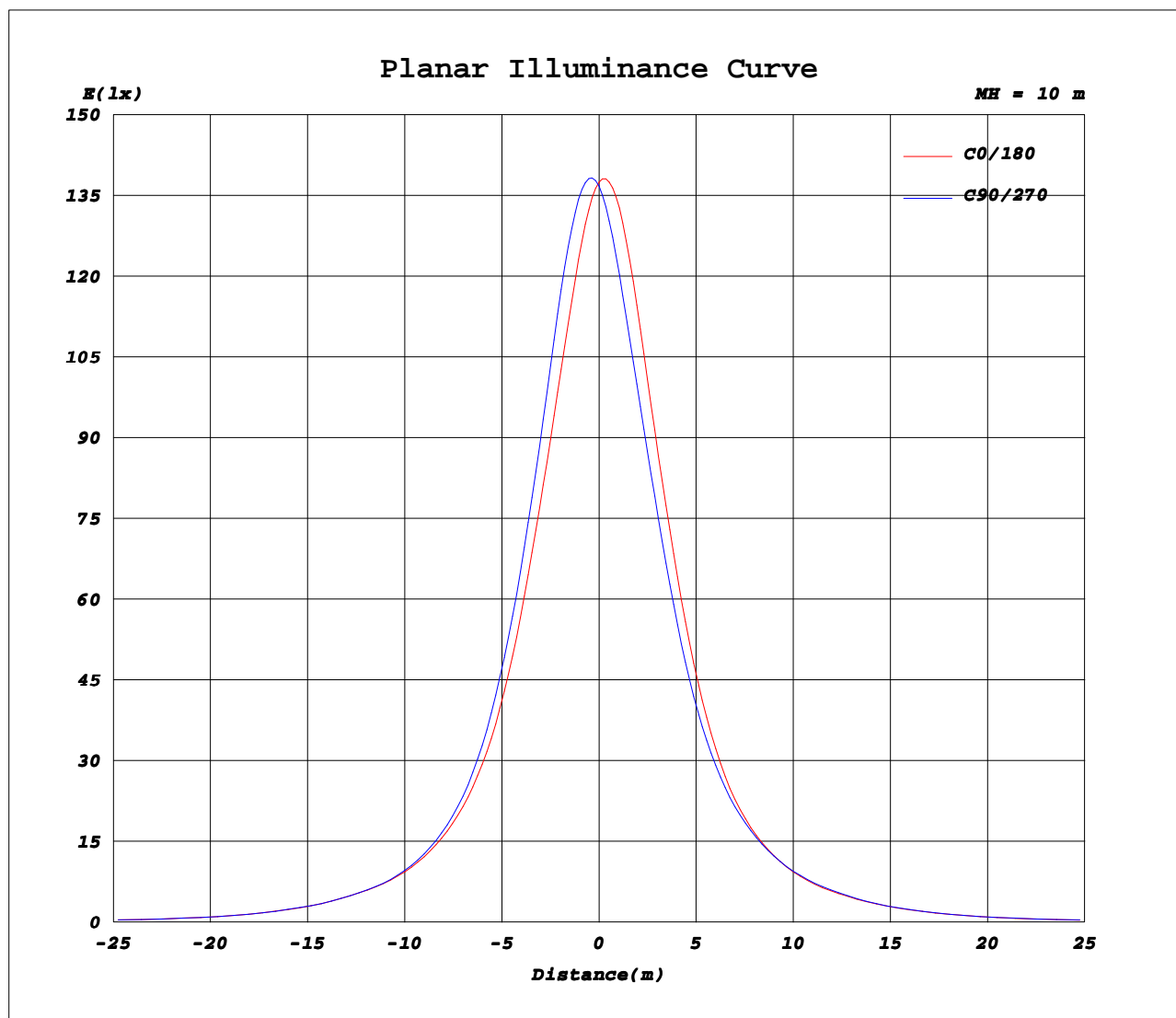
AvgL	cd/m2
L_0~180(65)av	23850
L_0~180(75)av	20994
L_0~180(85)av	19381
L_90~270(65)av	24111
L_90~270(75)av	21832
L_90~270(85)av	23501
L_45(65)av	24012
L_45(75)av	21366
L_45(85)av	20372

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--1

UNIT: #10cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1375	1376	1375	1375	1375	1373	1368	1365	1365	1365	1365	1364	1375	1376	1375	1375	1375	1373	1368
5	1281	1293	1305	1321	1337	1359	1378	1384	1385	1379	1370	1357	1364	1351	1337	1318	1302	1280	1253
10	1120	1137	1151	1175	1199	1234	1275	1289	1289	1281	1265	1244	1246	1223	1202	1175	1152	1123	1090
15	948	959	971	991	1013	1046	1092	1110	1110	1104	1085	1067	1067	1046	1027	1003	983	955	924
20	778	785	791	808	826	855	895	910	910	906	890	877	879	862	849	829	812	786	757
25	619	620	624	640	653	677	711	724	722	719	706	696	697	683	671	658	647	628	605
30	488	485	485	497	507	526	551	561	559	556	545	537	540	528	520	514	510	499	484
35	392	386	383	389	396	408	426	433	430	427	419	413	416	410	406	405	405	400	391
40	321	315	310	314	317	326	338	342	339	337	329	326	329	326	326	327	330	328	323
45	266	260	256	259	260	265	273	275	273	271	265	263	265	264	266	269	273	273	269
50	226	223	219	220	221	224	228	229	227	225	221	220	222	221	222	226	229	229	228
55	185	182	178	179	179	181	185	186	184	182	178	178	180	180	183	186	189	188	184
60	143	139	136	136	135	137	142	143	141	140	137	136	140	140	143	145	147	145	141
65	102	99.0	97.2	97.1	97.5	98.9	102	102	101	100	99.0	98.4	100	100	103	104	105	104	102
70	76.6	74.9	74.1	74.2	74.1	75.1	77.0	77.4	76.6	75.4	74.9	73.6	74.9	74.5	76.1	77.0	77.7	77.9	76.7
75	55.0	53.5	52.1	52.3	52.4	53.3	56.0	55.8	54.8	54.2	52.6	52.6	53.7	54.8	56.0	57.1	58.5	58.3	57.0
80	36.0	35.0	33.9	33.8	33.7	34.6	36.5	36.5	35.2	34.3	33.5	33.3	34.4	35.5	37.5	38.5	39.6	40.2	38.8
85	17.3	16.4	15.1	15.3	15.3	17.3	20.2	20.0	18.7	17.8	16.5	15.7	16.5	17.7	19.2	18.1	17.5	19.4	20.7
90	3.81	3.61	2.70	2.84	4.21	6.36	7.41	6.88	5.07	3.88	2.90	3.18	3.25	3.74	4.19	4.67	5.19	6.48	6.85
95	2.07	2.03	1.96	1.96	2.23	2.59	3.07	2.90	2.44	1.98	1.91	2.03	1.29	1.24	1.09	1.04	1.10	1.25	1.19
100	2.13	2.13	2.14	2.13	2.14	2.13	2.08	2.08	2.09	2.09	2.10	2.10	1.21	1.20	1.19	1.17	1.16	1.17	1.19
105	2.46	2.48	2.54	2.56	2.53	2.56	2.51	2.49	2.46	2.48	2.52	2.46	1.44	1.44	1.47	1.43	1.41	1.44	1.52
110	2.86	2.88	2.93	3.01	3.10	3.09	3.05	3.03	3.03	2.96	2.89	2.84	1.68	1.68	1.71	1.78	1.82	1.90	1.97
115	3.34	3.35	3.40	3.49	3.59	3.67	3.59	3.58	3.52	3.41	3.33	3.30	2.02	2.01	2.03	2.11	2.25	2.36	2.43
120	3.87	3.87	3.92	4.00	4.08	4.13	4.08	4.05	4.00	3.91	3.83	3.80	2.41	2.41	2.42	2.54	2.65	2.77	2.86
125	4.44	4.43	4.48	4.56	4.64	4.68	4.59	4.58	4.55	4.46	4.36	4.34	2.88	2.87	2.89	3.02	3.13	3.27	3.36
130	5.03	5.02	5.01	5.02	5.14	5.19	5.10	5.09	5.04	4.90	4.89	4.92	3.43	3.43	3.42	3.49	3.64	3.80	3.88
135	5.62	5.60	5.58	5.57	5.66	5.70	5.61	5.60	5.55	5.45	5.47	5.51	4.05	4.05	4.01	4.06	4.20	4.35	4.44
140	6.14	6.14	6.05	6.06	6.14	6.18	6.11	6.10	6.03	5.96	6.02	6.08	4.72	4.71	4.67	4.66	4.77	4.92	5.02
145	6.53	6.53	6.54	6.52	6.52	6.58	6.52	6.51	6.42	6.42	6.47	6.54	5.30	5.32	5.27	5.25	5.30	5.44	5.53
150	6.82	6.87	6.87	6.88	6.86	6.88	6.84	6.82	6.80	6.80	6.83	6.86	5.82	5.83	5.80	5.80	5.81	5.88	5.94
155	7.05	7.07	7.07	7.08	7.12	7.12	7.11	7.10	7.10	7.08	7.09	7.12	6.27	6.27	6.23	6.23	6.25	6.29	6.32
160	7.15	7.19	7.21	7.23	7.25	7.27	7.27	7.28	7.29	7.27	7.28	7.28	6.64	6.62	6.59	6.58	6.57	6.57	6.58
165	7.22	7.25	7.27	7.31	7.34	7.35	7.35	7.36	7.36	7.38	7.38	7.36	6.91	6.90	6.87	6.85	6.79	6.79	6.78
170	7.23	7.26	7.26	7.29	7.33	7.36	7.35	7.37	7.37	7.37	7.38	7.37	7.08	7.08	7.05	7.00	6.96	6.94	6.92
175	7.24	7.25	7.27	7.32	7.34	7.32	7.30	7.31	7.33	7.36	7.35	7.30	7.19	7.18	7.19	7.18	7.13	7.09	7.08
180	7.30	7.29	7.31	7.34	7.31	7.27	7.28	7.28	7.29	7.30	7.27	7.22	7.30	7.29	7.31	7.34	7.31	7.27	7.28

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:LUC

Test Date:08 March 2019

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity:65.0%

Test Distance:8.000m [K=1.0000]

Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.9V I:0.5019A P:105.3W PF:0.9546 Lamp Flux:15361.5x1 lm		
NAME: HB2000-100W-5700K-45D-03.07 사출 Lens_190308 TYPE:LED	WEIGHT:	
SPEC.:HB2000-100W-5700K-45D-03.07 사출 Lens_190308 DIM.:	SERIAL No.:	
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: #10cd

C(DEC) γ (DEC)	285	300	315	330	345														
0	1365	1365	1365	1365	1364														
5	1244	1245	1248	1259	1268														
10	1079	1081	1086	1099	1111														
15	914	918	923	935	946														
20	750	755	760	771	780														
25	600	604	610	617	623														
30	480	485	489	494	495														
35	391	395	398	400	399														
40	323	327	329	330	328														
45	270	273	274	274	272														
50	229	231	231	231	230														
55	184	188	189	190	189														
60	141	144	145	147	147														
65	102	103	104	105	105														
70	77.0	77.8	78.3	79.2	78.7														
75	57.3	57.5	57.6	57.6	57.2														
80	38.8	38.9	38.6	38.9	38.2														
85	20.4	20.4	19.8	20.1	19.3														
90	6.27	4.97	3.96	3.89	3.77														
95	1.08	1.05	1.04	1.15	1.27														
100	1.19	1.19	1.20	1.21	1.22														
105	1.51	1.45	1.49	1.48	1.42														
110	1.95	1.90	1.84	1.74	1.69														
115	2.43	2.32	2.20	2.09	2.04														
120	2.85	2.76	2.66	2.53	2.47														
125	3.37	3.29	3.15	3.03	2.96														
130	3.90	3.82	3.66	3.58	3.55														
135	4.47	4.40	4.25	4.18	4.17														
140	5.04	4.95	4.84	4.77	4.81														
145	5.54	5.43	5.41	5.39	5.37														
150	5.94	5.89	5.90	5.87	5.87														
155	6.31	6.28	6.25	6.23	6.26														
160	6.56	6.54	6.52	6.51	6.53														
165	6.76	6.74	6.73	6.71	6.74														
170	6.92	6.89	6.86	6.86	6.88														
175	7.08	7.09	7.06	7.02	7.03														
180	7.28	7.29	7.30	7.27	7.22														

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:LUC

Test Date:08 March 2019

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity:65.0%

Test Distance:8.000m [K=1.0000]

Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	13748	13755	13751	13752	13753	13734	13675	13650	13652	13646
3.0	13292	13379	13449	13559	13672	13786	13871	13902	13898	13867
6.0	12523	12655	12787	12972	13161	13404	13657	13750	13757	13700
9.0	11542	11703	11857	12087	12335	12660	13024	13153	13163	13091
12.0	10522	10659	10801	11029	11268	11620	12079	12256	12251	12171
15.0	9482	9590	9709	9915	10129	10464	10920	11102	11099	11037
18.0	8467	8554	8639	8807	9001	9311	9724	9894	9898	9843
21.0	7448	7506	7571	7723	7904	8179	8564	8718	8714	8670
24.0	6483	6509	6566	6715	6860	7115	7460	7592	7583	7548
27.0	5629	5632	5650	5796	5920	6131	6445	6550	6543	6506
30.0	4881	4853	4853	4971	5069	5256	5509	5608	5595	5564
33.0	4265	4218	4194	4286	4358	4497	4723	4795	4769	4740
36.0	3758	3698	3664	3724	3777	3898	4062	4124	4092	4058
39.0	3334	3276	3230	3277	3308	3400	3535	3582	3552	3525
42.0	2971	2916	2863	2900	2920	2996	3096	3131	3104	3080
45.0	2661	2605	2560	2587	2602	2649	2728	2753	2732	2708
48.0	2395	2348	2307	2332	2340	2374	2424	2439	2424	2404
51.0	2199	2160	2119	2133	2135	2164	2213	2219	2200	2183
54.0	1943	1903	1862	1876	1874	1898	1942	1954	1930	1906
57.0	1685	1659	1624	1638	1637	1661	1699	1708	1683	1663
60.0	1425	1392	1356	1360	1349	1372	1424	1433	1412	1401
63.0	1158	1127	1103	1103	1102	1115	1156	1160	1148	1142
66.0	950.6	926.7	909.2	911.3	914.3	927.8	962.9	965.0	947.8	945.7
69.0	805.8	789.9	780.8	779.3	779.3	788.9	809.3	812.0	808.1	797.1
72.0	677.3	661.3	648.4	652.8	655.0	662.8	689.3	688.3	670.3	668.1
75.0	549.5	535.5	521.2	522.9	523.5	533.1	560.1	557.6	548.0	541.9
78.0	435.1	424.5	414.5	413.3	410.9	420.3	438.8	438.9	426.1	416.3
81.0	324.5	314.5	304.9	303.5	301.7	312.1	331.0	330.3	317.7	309.0
84.0	211.9	204.8	196.2	199.9	200.3	214.7	233.7	233.9	218.4	210.4
87.0	98.02	92.97	87.85	90.92	91.23	103.1	125.6	119.6	107.4	101.9
90.0	38.05	36.05	27.04	28.41	42.09	63.58	74.06	68.76	50.71	38.83
93.0	19.31	19.04	18.51	20.53	27.99	37.63	45.72	42.69	30.34	21.18
96.0	20.64	20.69	19.76	19.60	21.06	22.52	24.73	24.02	21.24	19.55
99.0	21.03	21.00	20.94	20.71	20.89	20.80	21.34	21.09	20.38	20.32
102.0	22.49	22.54	22.79	22.78	22.66	22.63	22.35	22.08	22.18	22.39
105.0	24.59	24.77	25.43	25.62	25.27	25.59	25.11	24.87	24.58	24.77
108.0	26.94	27.09	27.83	28.38	28.77	28.82	28.42	28.16	27.90	27.65
111.0	29.54	29.74	30.22	30.99	32.16	32.06	31.59	31.38	31.37	30.45
114.0	32.39	32.57	33.01	33.83	35.01	35.61	34.76	34.63	34.35	33.07
117.0	35.44	35.56	36.06	36.98	37.80	38.50	38.06	37.69	37.13	36.17
120.0	38.65	38.74	39.23	40.00	40.75	41.28	40.77	40.48	39.95	39.13
123.0	42.02	42.09	42.59	43.28	44.08	44.47	43.70	43.52	43.07	42.27
126.0	45.56	45.52	45.87	46.75	47.44	47.90	47.01	46.91	46.59	45.56
129.0	49.16	49.01	49.07	49.30	50.44	50.91	49.99	49.95	49.42	48.15
132.0	52.70	52.60	52.49	52.41	53.44	53.97	53.01	52.96	52.40	51.09
135.0	56.17	55.97	55.84	55.72	56.63	57.01	56.08	55.95	55.53	54.46
138.0	59.42	59.37	58.65	58.63	59.64	59.95	59.06	59.00	58.52	57.73
141.0	62.28	62.32	61.57	61.67	62.24	62.70	62.04	61.93	61.17	60.56
144.0	64.62	64.76	64.60	64.35	64.37	65.01	64.44	64.32	63.59	63.41
147.0	66.34	66.53	66.92	66.70	66.60	66.86	66.73	66.50	65.94	65.79
150.0	68.25	68.72	68.68	68.76	68.58	68.75	68.38	68.24	67.98	67.96
153.0	69.82	70.10	69.96	70.05	70.22	70.21	69.98	69.84	69.93	69.72
156.0	70.79	71.04	71.13	71.04	71.53	71.53	71.51	71.41	71.41	71.27
159.0	71.40	71.71	71.92	72.00	72.49	72.48	72.48	72.51	72.55	72.34
162.0	71.85	72.19	72.30	72.76	72.94	73.05	73.21	73.33	73.08	73.26
165.0	72.22	72.52	72.71	73.12	73.35	73.48	73.47	73.62	73.63	73.84
168.0	72.43	72.68	72.76	72.97	73.41	73.87	73.65	73.76	73.90	73.76
171.0	72.22	72.48	72.58	72.90	73.32	73.41	73.40	73.51	73.64	73.67
174.0	72.28	72.33	72.66	73.12	73.32	73.25	73.09	73.21	73.33	73.56
177.0	72.73	72.81	72.92	73.40	73.49	73.12	73.00	73.00	73.22	73.41
180.0	72.98	72.89	73.06	73.36	73.09	72.74	72.77	72.82	72.93	73.00
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	13651	13642	13748	13755	13751	13752	13753	13734	13675	13650
3.0	13803	13724	13806	13735	13655	13545	13439	13286	13079	12999
6.0	13572	13433	13490	13331	13158	12948	12761	12524	12229	12123
9.0	12924	12737	12760	12553	12349	12084	11862	11575	11238	11125
12.0	11979	11774	11774	11552	11345	11070	10846	10565	10234	10129
15.0	10854	10672	10675	10461	10274	10031	9831	9553	9245	9143
18.0	9675	9520	9537	9349	9195	8993	8812	8553	8226	8137
21.0	8515	8398	8420	8254	8121	7929	7771	7530	7258	7180
24.0	7414	7315	7328	7171	7050	6908	6782	6586	6334	6281
27.0	6389	6283	6302	6176	6076	5963	5882	5726	5518	5477
30.0	5452	5368	5402	5280	5197	5143	5098	4988	4841	4801

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: LUC

Test Date: 08 March 2019

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity: 65.0%

Test Distance: 8.000m [K=1.0000]

Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

Photometric Data Table [cd]

33.0	4651	4583	4600	4527	4492	4460	4438	4361	4242	4229
36.0	3981	3933	3955	3903	3874	3869	3882	3842	3759	3763
39.0	3450	3414	3438	3405	3402	3410	3430	3410	3353	3356
42.0	3014	2991	3014	2987	2999	3019	3055	3044	3002	3007
45.0	2651	2629	2655	2638	2656	2689	2727	2726	2692	2704
48.0	2359	2341	2363	2350	2371	2405	2445	2446	2422	2433
51.0	2140	2128	2149	2144	2166	2199	2229	2232	2214	2217
54.0	1872	1863	1890	1889	1919	1950	1983	1977	1938	1942
57.0	1628	1624	1649	1650	1676	1695	1715	1705	1674	1671
60.0	1370	1363	1396	1401	1430	1446	1472	1455	1410	1408
63.0	1121	1110	1139	1146	1168	1182	1194	1180	1148	1151
66.0	931.4	926.5	938.2	939.8	960.5	972.6	984.4	978.8	949.2	953.7
69.0	793.7	780.7	787.6	786.0	799.8	805.7	815.9	815.1	803.5	808.3
72.0	652.8	650.9	662.1	666.4	685.3	697.3	707.8	705.9	692.4	692.2
75.0	525.7	525.5	537.2	547.9	560.4	571.4	585.2	583.1	570.0	572.5
78.0	409.1	406.4	421.2	431.2	449.6	457.4	469.2	472.6	462.6	460.5
81.0	301.6	298.5	308.4	319.7	338.7	345.6	354.5	360.6	349.7	350.0
84.0	199.0	194.9	200.7	211.8	227.8	217.6	208.1	230.5	240.5	239.6
87.0	91.47	87.19	90.27	94.57	104.0	97.04	109.0	120.9	115.1	119.9
90.0	29.02	31.77	32.53	37.40	41.90	46.70	51.90	64.76	68.49	62.70
93.0	18.26	19.02	11.98	11.37	10.33	11.21	21.39	35.97	33.42	28.20
96.0	19.35	20.49	12.44	12.67	11.28	10.59	10.55	10.60	10.51	10.43
99.0	20.41	20.60	11.99	11.86	11.52	11.34	11.23	11.30	11.43	11.48
102.0	22.59	22.56	12.96	12.89	12.80	12.55	12.54	12.63	13.04	12.94
105.0	25.21	24.64	14.37	14.35	14.71	14.32	14.07	14.45	15.19	15.05
108.0	27.36	26.67	15.70	15.65	16.12	16.53	16.27	17.17	17.90	17.69
111.0	29.73	29.29	17.46	17.39	17.62	18.41	19.24	19.85	20.61	20.48
114.0	32.38	32.03	19.45	19.44	19.60	20.40	21.79	22.56	23.34	23.26
117.0	35.26	34.93	21.66	21.63	21.78	22.79	23.91	25.30	26.19	26.01
120.0	38.33	37.99	24.10	24.09	24.20	25.42	26.46	27.67	28.61	28.54
123.0	41.49	41.20	26.82	26.78	26.97	28.13	29.20	30.40	31.46	31.49
126.0	44.63	44.47	29.87	29.76	29.93	31.31	32.40	33.82	34.67	34.79
129.0	47.88	48.01	33.15	33.13	33.05	33.97	35.41	36.94	37.74	37.94
132.0	51.13	51.54	36.73	36.67	36.37	36.88	38.58	40.16	41.00	41.30
135.0	54.67	55.11	40.49	40.46	40.12	40.55	41.96	43.49	44.42	44.66
138.0	58.06	58.65	44.52	44.38	44.00	44.33	45.49	46.90	47.84	48.13
141.0	61.27	61.83	48.29	48.44	47.95	47.81	48.75	50.36	51.35	51.53
144.0	63.85	64.60	51.80	52.14	51.55	51.31	52.06	53.43	54.34	54.45
147.0	66.45	66.71	55.20	55.32	54.97	54.82	55.02	56.23	57.19	56.96
150.0	68.27	68.61	58.24	58.28	58.01	57.98	58.14	58.76	59.42	59.41
153.0	69.86	70.26	61.03	61.02	60.56	60.67	60.94	61.11	61.69	61.65
156.0	71.37	71.62	63.54	63.44	63.07	63.08	63.28	63.55	63.83	63.60
159.0	72.54	72.61	65.70	65.59	65.34	65.08	65.10	65.23	65.38	65.14
162.0	73.29	73.10	67.47	67.26	67.14	66.98	66.57	66.75	66.72	66.45
165.0	73.79	73.57	69.14	69.01	68.67	68.54	67.90	67.86	67.76	67.64
168.0	73.96	73.82	70.33	70.33	69.90	69.52	69.07	68.90	68.70	68.84
171.0	73.74	73.55	71.01	71.03	70.76	70.33	69.83	69.63	69.34	69.35
174.0	73.59	73.11	71.56	71.58	71.63	71.40	70.93	70.56	70.38	70.40
177.0	73.26	72.82	72.44	72.34	72.39	72.36	71.92	71.57	71.68	71.64
180.0	72.66	72.19	72.98	72.90	73.05	73.36	73.08	72.73	72.77	72.83
G/C	300.0	315.0	330.0	345.0						
0.0	13652	13646	13651	13642						
3.0	13012	13027	13098	13158						
6.0	12136	12171	12286	12392						
9.0	11140	11193	11325	11443						
12.0	10154	10203	10326	10453						
15.0	9176	9230	9352	9457						
18.0	8185	8243	8369	8469						
21.0	7237	7293	7389	7474						
24.0	6330	6380	6469	6531						
27.0	5528	5569	5634	5666						
30.0	4854	4891	4941	4953						
33.0	4271	4303	4341	4337						
36.0	3796	3824	3850	3833						
39.0	3391	3412	3427	3411						
42.0	3045	3057	3064	3044						
45.0	2731	2743	2743	2725						
48.0	2458	2465	2463	2445						
51.0	2244	2250	2246	2234						
54.0	1973	1985	1993	1984						
57.0	1701	1715	1724	1720						
60.0	1437	1449	1474	1468						
63.0	1171	1184	1194	1195						
66.0	972.2	977.3	988.0	981.3						

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 08 March 2019

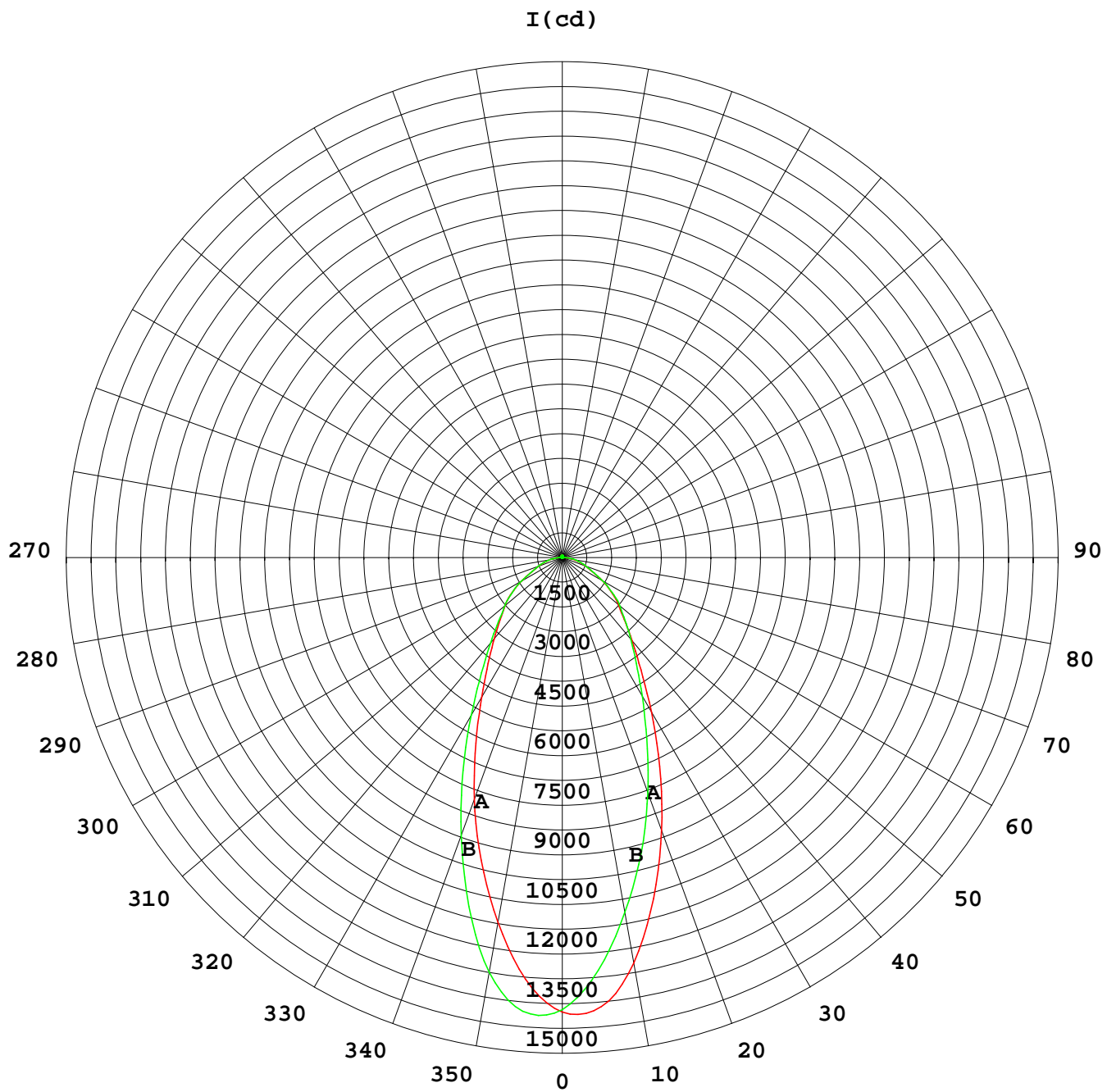
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19

Photometric Data Table [cd]

69.0	814.6	823.4	831.5	826.0
72.0	696.4	700.8	708.0	704.6
75.0	575.2	575.8	576.1	572.0
78.0	459.7	462.5	464.4	457.7
81.0	349.9	348.3	351.1	344.7
84.0	240.6	238.3	238.1	230.6
87.0	109.5	101.6	106.0	113.3
90.0	49.68	39.58	38.93	37.67
93.0	18.38	10.98	10.31	11.28
96.0	10.50	10.72	11.86	13.00
99.0	11.43	11.59	11.89	12.31
102.0	12.84	12.82	12.96	12.83
105.0	14.50	14.91	14.76	14.24
108.0	16.99	17.23	16.36	15.70
111.0	19.98	19.07	18.05	17.52
114.0	22.51	21.20	20.16	19.65
117.0	24.96	23.82	22.59	22.04
120.0	27.63	26.58	25.28	24.67
123.0	30.58	29.49	28.13	27.56
126.0	34.03	32.67	31.45	30.75
129.0	37.13	35.74	34.60	34.08
132.0	40.46	38.85	38.09	37.92
135.0	44.03	42.51	41.79	41.74
138.0	47.33	45.97	45.55	45.60
141.0	50.48	49.54	48.92	49.35
144.0	53.44	53.01	52.69	52.77
147.0	56.32	56.04	55.68	55.51
150.0	58.92	58.98	58.74	58.68
153.0	61.39	61.08	60.93	61.01
156.0	63.37	63.04	62.94	63.27
159.0	65.02	64.65	64.61	64.86
162.0	66.25	66.14	65.87	66.22
165.0	67.43	67.35	67.08	67.37
168.0	68.35	68.05	68.09	68.34
171.0	69.25	68.91	68.85	69.03
174.0	70.39	70.12	69.80	69.89
177.0	71.75	71.64	71.14	71.21
180.0	72.92	73.01	72.65	72.20

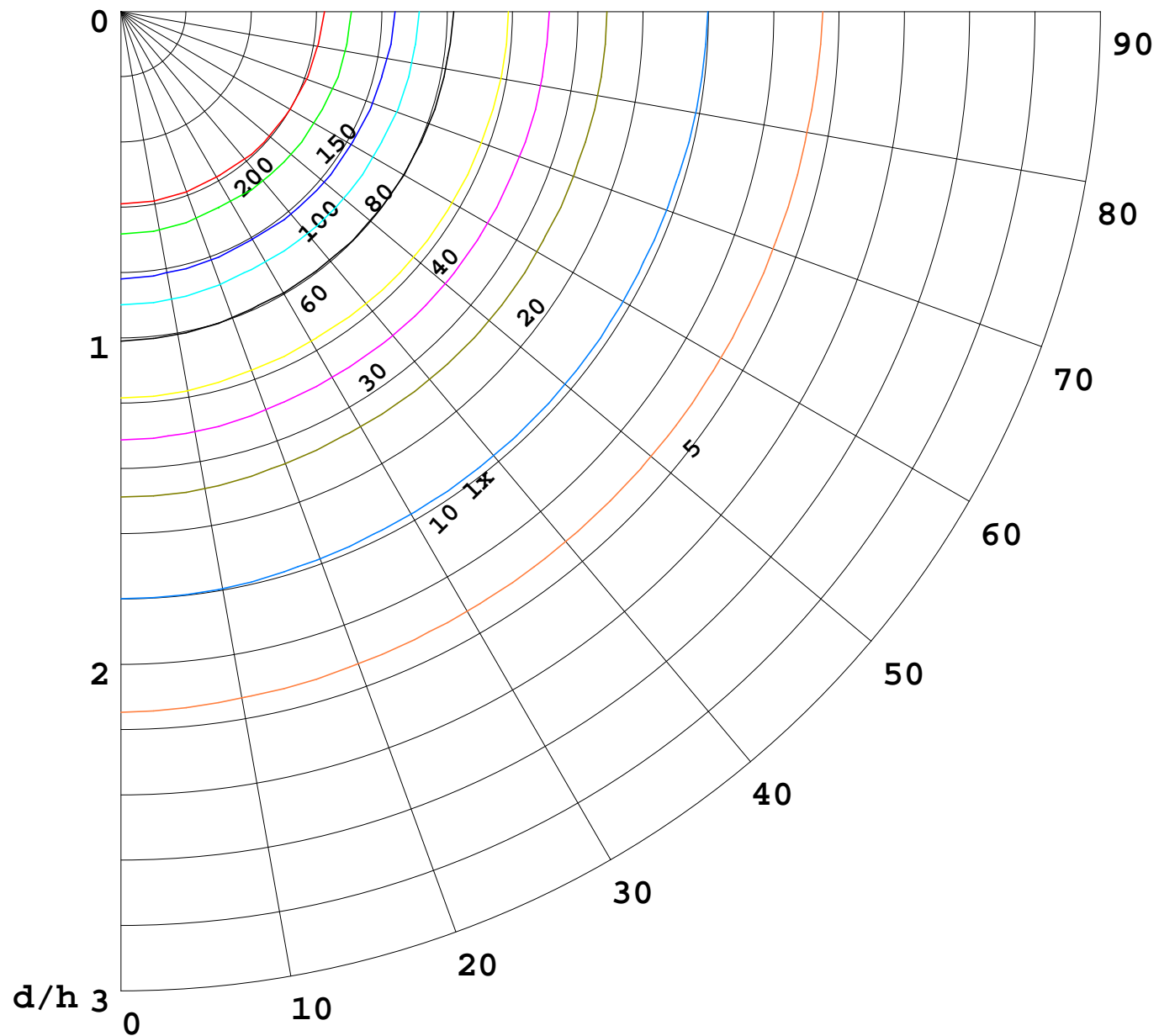
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 08 March 2019

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100W-5700K-45D-03.07 사출 Lens_19



1000 lm

$K = 1$



F = 1000 lm
 K = 0.7
 H_{cc} = 0.8 m
 H_{fc} = 0.0 m
 E_{ave} = 100 lx

	P_{cc}	P_w	P_{fc}
—————	70	50	30
—————	50	30	20

