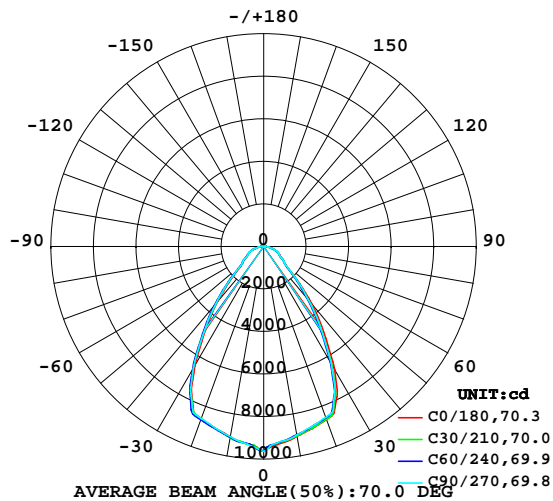


**LUMINAIRE PHOTOMETRIC TEST REPORT**

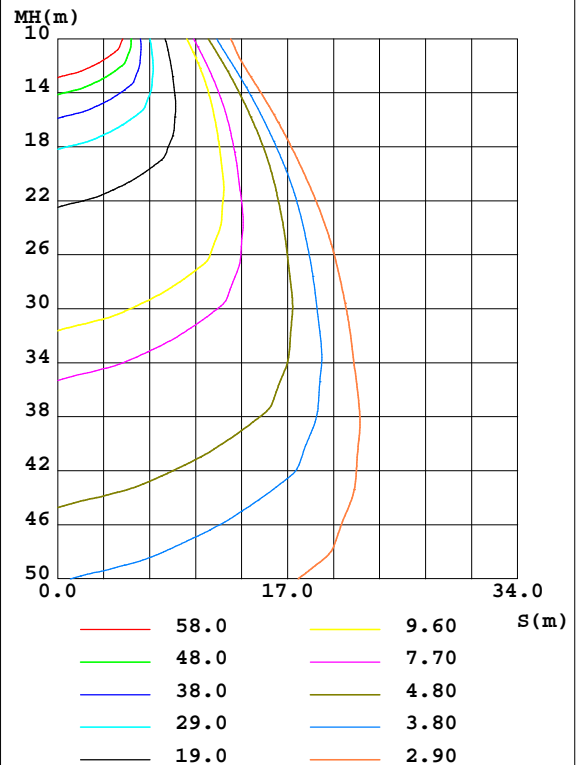
Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 136.88 lm/W			
HB2000-MODEL-C1-57K-90D-REF_181105		Imax(cd)	9636	S/MH(C0/180)	1.02
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.04
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	14385	$\eta$ UP,DN(C0-180)	1.0,48.3
NOMINAL FLUX(lm)	14385.4	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.8,50.0
LAMPS INSIDE	1	$\eta$ up(%)	1.8	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220	$\eta$ down(%)	98.2	CIBSE SHR MAX	1.10

**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:03 January 2018

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: HB2000-100G-C1-57K-90D-REF\_181105

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	9068	9020	9003	9013	9084	9135	9076	9026	0- 10	878.5	878.5	6.11,6.11
20	8653	8656	8558	8519	8636	8683	8611	8582	10- 20	2493	3372	23.4,23.4
30	6690	6383	6347	6330	6481	6675	6626	6686	20- 30	3601	6973	48.5,48.5
40	3532	3234	3272	3246	3347	3579	3508	3517	30- 40	3017	9990	69.4,69.4
50	1363	1331	1344	1337	1376	1436	1419	1396	40- 50	1723	11714	81.4,81.4
60	886.3	871.9	874.7	878.0	891.9	904.3	894.9	888.6	50- 60	1008	12721	88.4,88.4
70	635.2	613.7	626.8	629.1	643.5	661.6	647.5	639.2	60- 70	770.3	13492	93.8,93.8
80	282.2	271.6	285.7	284.5	286.3	304.5	297.9	289.3	70- 80	485.4	13977	97.2,97.2
90	27.71	26.27	50.37	30.71	24.12	27.77	45.98	28.15	80- 90	156.2	14133	98.2,98.2
100	21.07	20.91	21.77	20.70	14.71	13.42	13.91	13.61	90-100	22.23	14156	98.4,98.4
110	28.05	30.18	32.14	30.13	21.22	21.54	23.24	21.68	100-110	22.50	14178	98.6,98.6
120	38.39	40.77	43.89	40.76	31.70	32.28	35.15	32.21	110-120	31.03	14209	98.8,98.8
130	49.58	50.78	53.91	50.87	43.41	43.00	46.01	42.51	120-130	37.87	14247	99,99
140	59.97	60.48	61.33	60.14	55.72	53.44	54.65	53.37	130-140	40.54	14287	99.3,99.3
150	68.03	68.05	67.61	67.50	64.38	62.60	62.36	62.35	140-150	38.53	14326	99.6,99.6
160	71.98	72.35	72.50	72.02	70.11	69.03	69.22	68.67	150-160	31.41	14357	99.8,99.8
170	76.40	76.40	76.50	76.60	76.03	75.03	74.79	74.44	160-170	20.69	14378	99.9,99.9
180	78.99	79.12	78.36	78.55	79.10	79.06	78.39	78.53	170-180	7.346	14385	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

**Conical surface Flux(90deg): 11014 lm**

**%lum = 76.6%**

**%lamp = 76.6%**

**Conical surface Flux(120deg): 12721 lm**

**%lum = 88.4%**

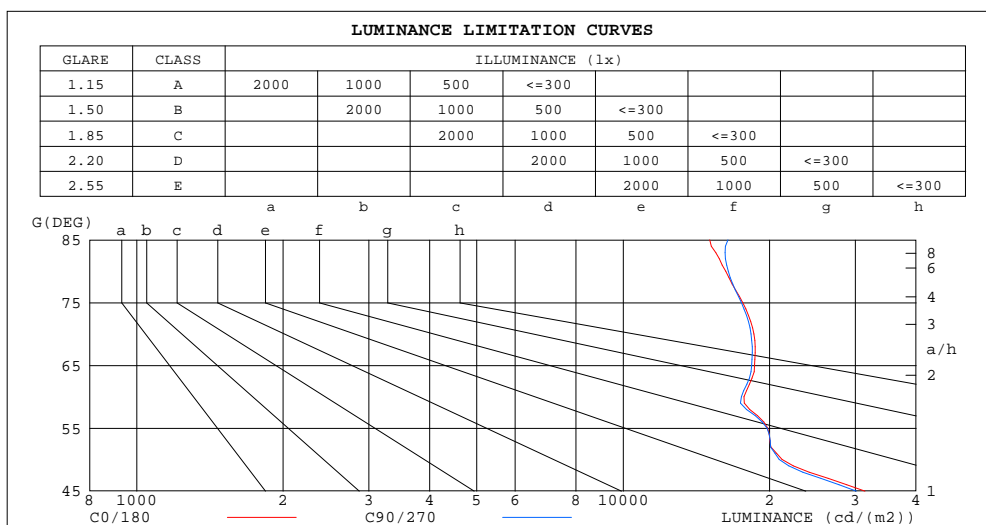
**%lamp = 88.4%**

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-57K-90D-REF\_181105**

**LUMINANCE LIMITATION CURVES**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G( DEG)	C0/180	C90/270
85	15064	16419
80	16248	16452
75	17603	17491
70	18572	18328
65	18634	18370
60	17727	17495
55	19819	19754
50	21208	20915
45	31397	30163

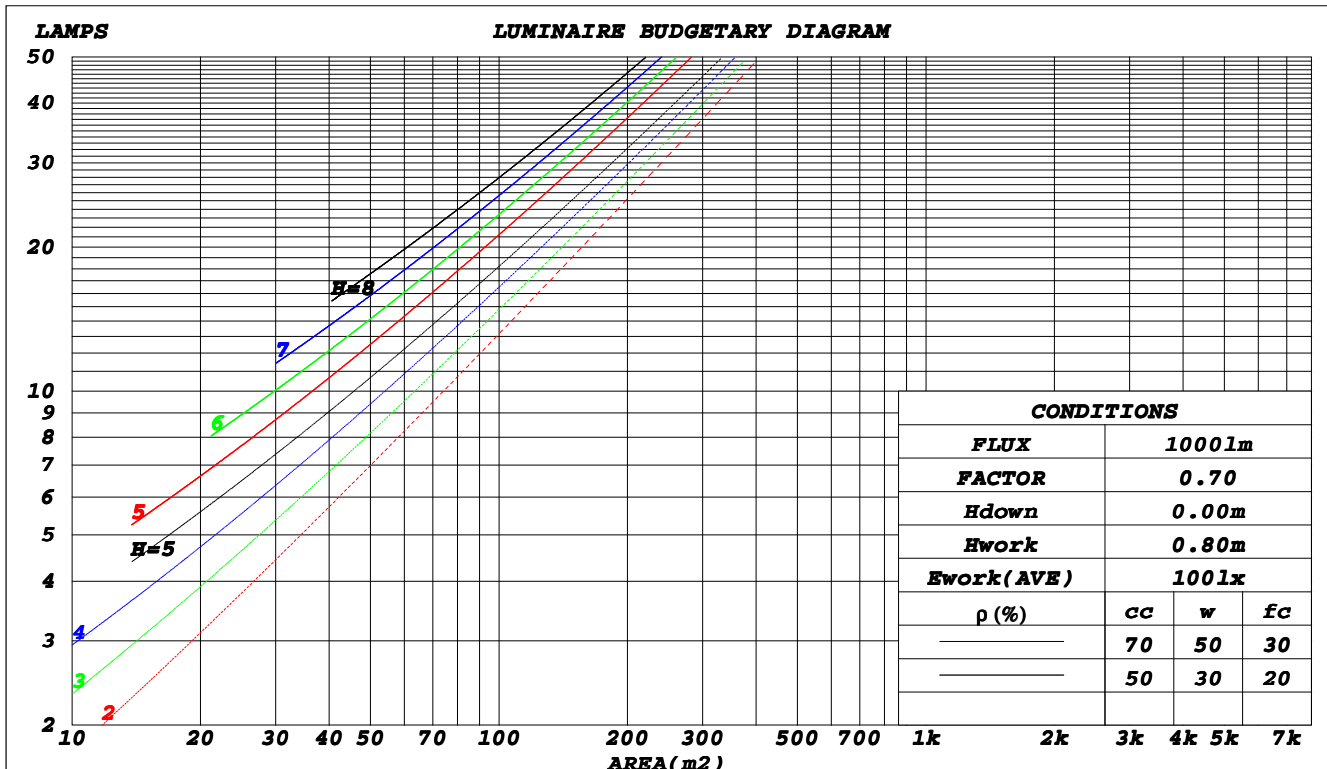
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.00	1.00	1.00	.98
1.0	1.07	1.04	1.01	1.05	1.02	.99	1.00	.98	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.97	.91	.87	.95	.90	.85	.91	.87	.83	.88	.84	.81	.84	.82	.79	.77
3.0	.88	.81	.76	.86	.80	.75	.83	.78	.74	.80	.76	.72	.78	.74	.71	.69
4.0	.80	.73	.67	.79	.72	.67	.76	.70	.66	.74	.69	.65	.71	.67	.64	.62
5.0	.73	.66	.61	.72	.65	.60	.70	.64	.59	.68	.63	.59	.66	.62	.58	.56
6.0	.68	.60	.55	.67	.60	.54	.65	.59	.54	.63	.58	.53	.61	.57	.53	.51
7.0	.62	.55	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.57	.52	.48	.47
8.0	.58	.51	.46	.57	.50	.46	.56	.50	.45	.55	.49	.45	.53	.48	.45	.43
9.0	.54	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.50	.45	.41	.40
10.0	.51	.44	.39	.50	.43	.39	.49	.43	.39	.48	.42	.39	.47	.42	.38	.37



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:03 January 2018

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: HB2000-100G-C1-57K-90D-REF\_181105

**WEC AND CCEC**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0	
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
$\rho_{fc}$	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.242	.138	.044	.235	.134	.043	.221	.127	.041	.208	.120	.039	.197	.114	.037		
2.0	.229	.125	.038	.223	.123	.038	.210	.117	.036	.199	.112	.035	.189	.107	.034		
3.0	.214	.114	.034	.209	.112	.034	.198	.107	.033	.188	.103	.032	.179	.099	.031		
4.0	.200	.104	.031	.196	.102	.030	.186	.099	.029	.178	.095	.029	.170	.092	.028		
5.0	.188	.096	.028	.184	.094	.027	.175	.091	.027	.168	.088	.026	.161	.086	.026		
6.0	.177	.089	.025	.173	.087	.025	.165	.085	.025	.159	.082	.024	.152	.080	.024		
7.0	.166	.082	.023	.163	.081	.023	.156	.079	.023	.150	.077	.022	.145	.075	.022		
8.0	.157	.077	.022	.154	.076	.021	.148	.074	.021	.143	.072	.021	.138	.071	.021		
9.0	.149	.072	.020	.146	.071	.020	.141	.070	.020	.136	.068	.019	.131	.067	.019		
10.0	.141	.068	.019	.139	.067	.019	.134	.066	.019	.130	.064	.018	.125	.063	.018		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.204	.204	.204	.174	.174	.174	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.189	.170	.153	.162	.146	.132	.111	.100	.091	.064	.058	.053	.020	.019	.017	
2.0	.177	.146	.119	.152	.125	.103	.104	.087	.072	.060	.051	.042	.019	.016	.014	
3.0	.167	.128	.096	.143	.110	.083	.099	.076	.058	.057	.045	.034	.018	.014	.011	
4.0	.159	.114	.079	.136	.098	.069	.094	.068	.048	.054	.040	.029	.017	.013	.009	
5.0	.151	.103	.067	.129	.089	.058	.089	.062	.041	.052	.036	.024	.017	.012	.008	
6.0	.143	.094	.058	.123	.081	.051	.085	.057	.036	.049	.033	.021	.016	.011	.007	
7.0	.137	.087	.051	.118	.075	.045	.081	.053	.032	.047	.031	.019	.015	.010	.006	
8.0	.131	.081	.046	.113	.070	.040	.078	.049	.029	.045	.029	.017	.015	.010	.006	
9.0	.126	.076	.042	.108	.066	.037	.075	.046	.026	.044	.027	.016	.014	.009	.005	
10.0	.121	.071	.039	.104	.062	.034	.072	.044	.024	.042	.026	.014	.014	.008	.005	

**C Range:** 0 - 360DEG  
**C Interval:** 15.0DEG  
**Test Speed:** HIGH  
**Temperature:** 25.3DEG  
**Operators:** LUC  
**Test Date:** 03 January 2018

**$\gamma$  Range:** 0 - 180DEG  
 **$\gamma$  Interval:** 1.0DEG  
**Test System:** EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
**Humidity:** 65.0%  
**Test Distance:** 8.000m [K=1.0000]  
**Remarks:** HB2000-100G-C1-57K-90D-REF\_181105

**UGR(Unified Glare Rating) Table**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm										
NAME: HB2000-100G-C1-57K-90D-REF_181105					TYPE:LED			WEIGHT:		
SPEC.:G5 288EA					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	21.6	22.8	21.9	23.0	23.3	21.5	22.7	21.8	22.9	23.1
3H	22.8	23.9	23.1	24.2	24.4	22.7	23.8	23.0	24.0	24.3
4H	23.3	24.4	23.7	24.7	24.9	23.2	24.3	23.5	24.5	24.8
6H	23.7	24.7	24.1	25.0	25.3	23.6	24.6	24.0	24.9	25.2
8H	23.9	24.8	24.2	25.1	25.5	23.8	24.8	24.1	25.1	25.4
12H	24.0	24.9	24.3	25.2	25.5	23.9	24.8	24.3	25.1	25.5
4H 2H	22.0	23.0	22.3	23.3	23.6	21.8	22.9	22.2	23.2	23.4
3H	23.4	24.3	23.8	24.6	24.9	23.3	24.2	23.6	24.5	24.8
4H	24.1	24.9	24.5	25.2	25.6	24.0	24.8	24.4	25.1	25.5
6H	24.6	25.4	25.0	25.7	26.1	24.5	25.3	24.9	25.6	26.0
8H	24.8	25.5	25.3	25.9	26.3	24.8	25.4	25.2	25.8	26.2
12H	25.0	25.6	25.4	26.0	26.4	24.9	25.5	25.4	26.0	26.4
8H 4H	24.3	25.0	24.7	25.4	25.8	24.2	24.9	24.6	25.3	25.7
6H	25.0	25.5	25.4	26.0	26.4	24.9	25.5	25.4	25.9	26.4
8H	25.3	25.8	25.7	26.2	26.7	25.2	25.7	25.7	26.2	26.6
12H	25.5	25.9	26.0	26.4	26.9	25.5	25.9	26.0	26.4	26.9
12H 4H	24.3	24.9	24.7	25.3	25.8	24.2	24.8	24.7	25.2	25.7
6H	25.0	25.5	25.5	26.0	26.5	25.0	25.5	25.4	25.9	26.4
8H	25.4	25.8	25.9	26.3	26.8	25.3	25.7	25.8	26.2	26.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.9 / - 0.5					+ 0.7 / - 0.5				
2.0H	+ 0.8 / - 0.4					+ 0.7 / - 0.4				

CIE Pub.117 Corrected 14385 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.3)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:03 January 2018

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: HB2000-100G-C1-57K-90D-REF\_181105

## UTILIZATION FACTORS TABLE

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

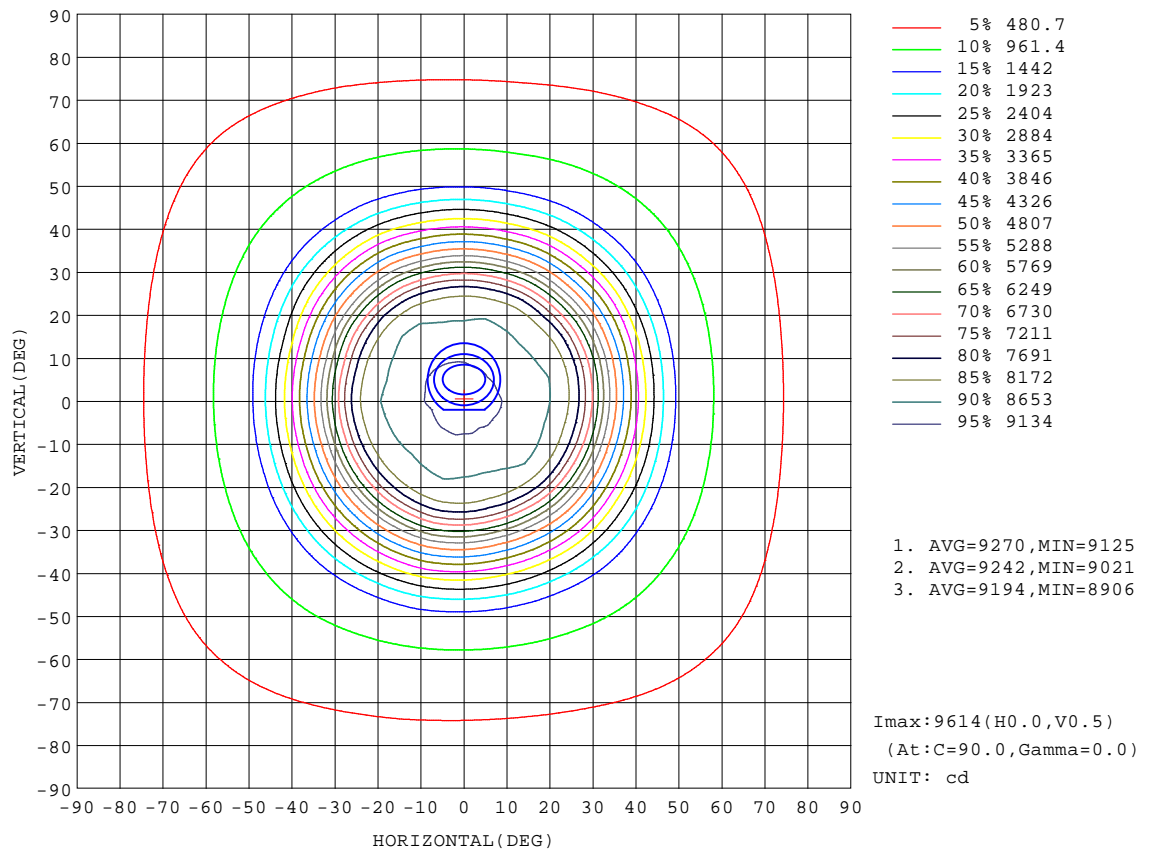
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	64	59	72	64	59	71	63	58	53
0.80	81	73	67	81	72	67	79	72	67	61
1.00	88	80	74	87	79	74	85	79	73	68
1.25	93	86	80	92	85	80	89	83	79	73
1.50	97	90	85	95	89	84	93	87	83	77
2.00	102	95	91	100	94	90	97	92	88	81
2.50	104	99	94	102	97	93	99	94	91	84
3.00	107	102	98	105	100	96	101	97	94	86
4.00	110	105	102	107	104	101	103	100	98	89
5.00	111	108	105	109	106	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

**C Range:** 0 - 360DEG  
**C Interval:** 15.0DEG  
**Test Speed:** HIGH  
**Temperature:** 25.3DEG  
**Operators:** LUC  
**Test Date:** 03 January 2018

**$\gamma$  Range:** 0 - 180DEG  
 **$\gamma$  Interval:** 1.0DEG  
**Test System:** EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
**Humidity:** 65.0%  
**Test Distance:** 8.000m [K=1.0000]  
**Remarks:** HB2000-100G-C1-57K-90D-REF\_181105

**ISOCANDELA DIAGRAM**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	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:03 January 2018**

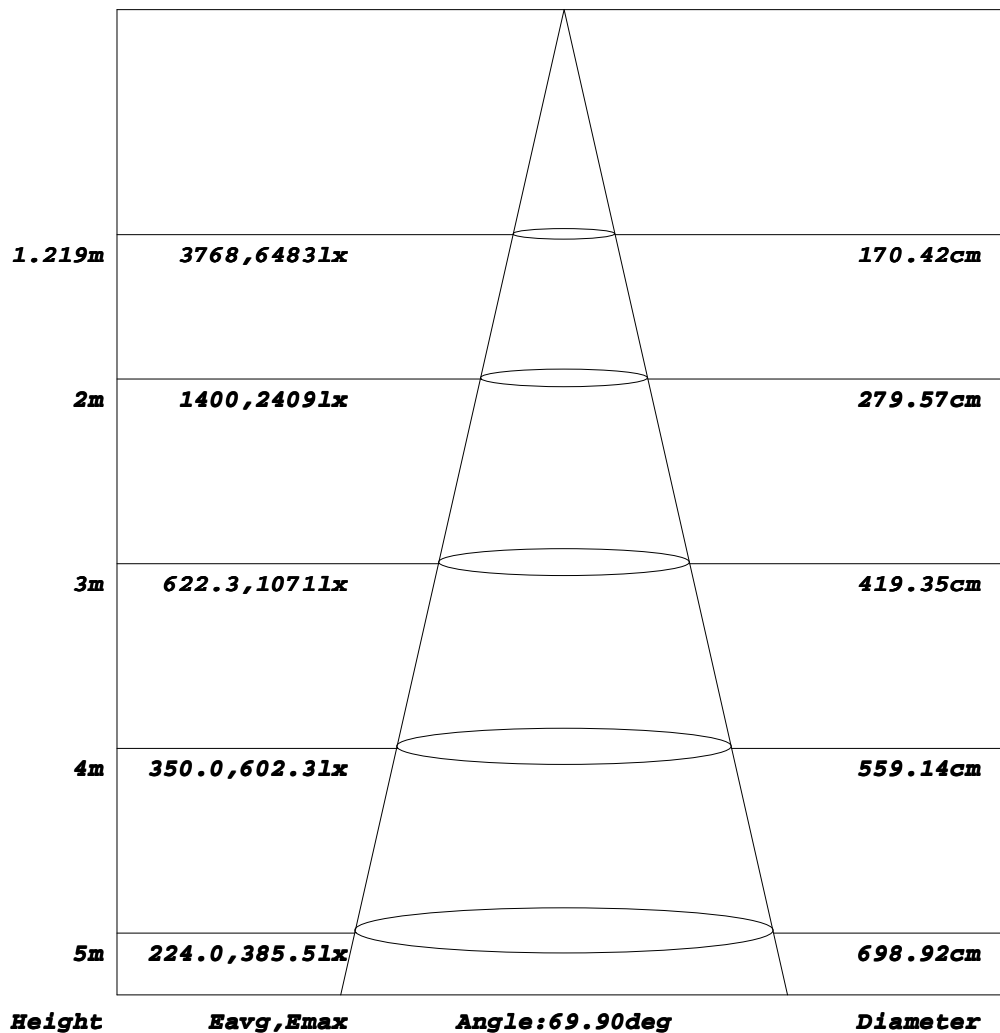
**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-57K-90D-REF\_181105**



**AAI Figure**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

**Flux out:8626 lm**



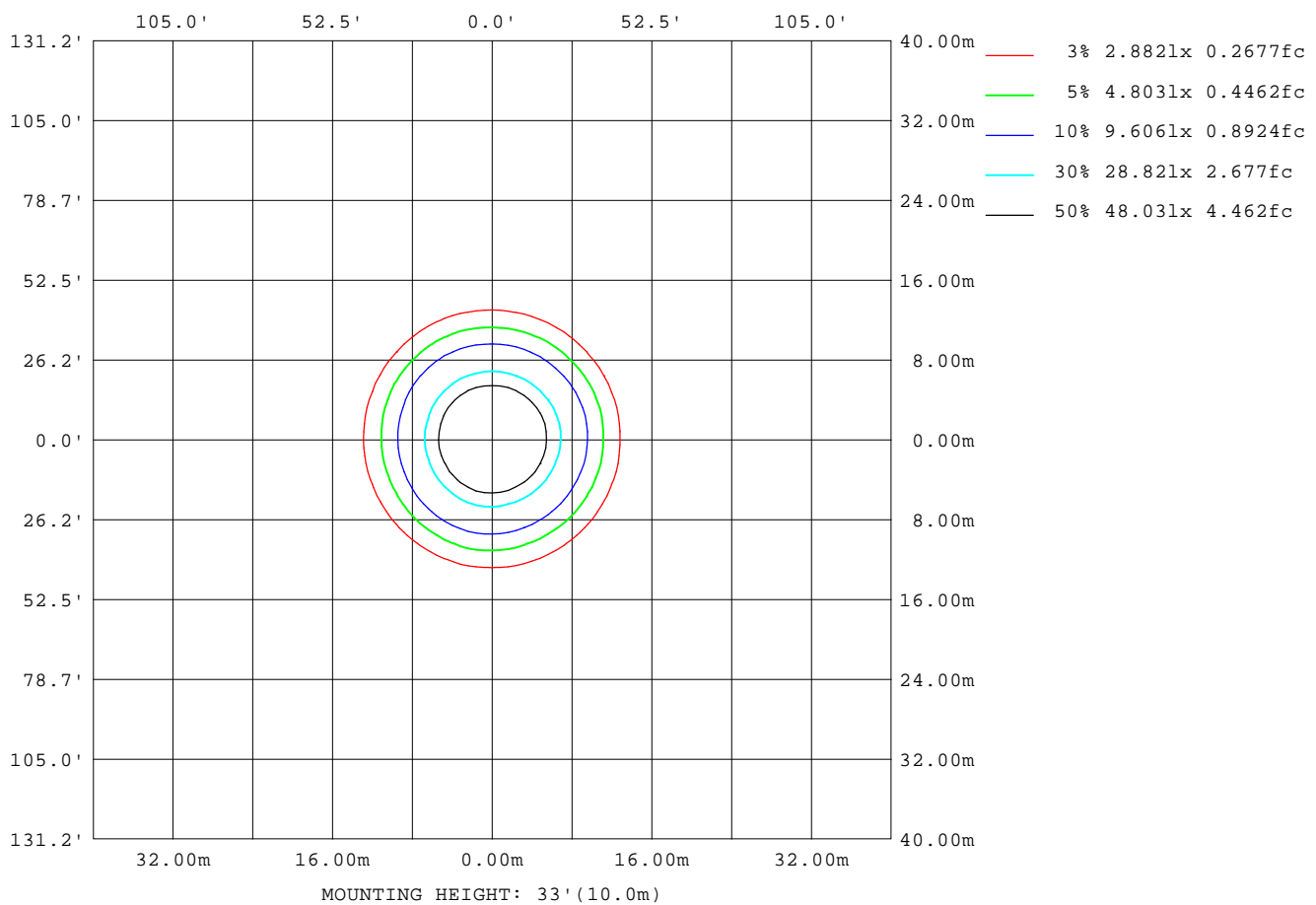
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**ISOLUX DIAGRAM**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	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: 03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**LED Avg.L Report**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

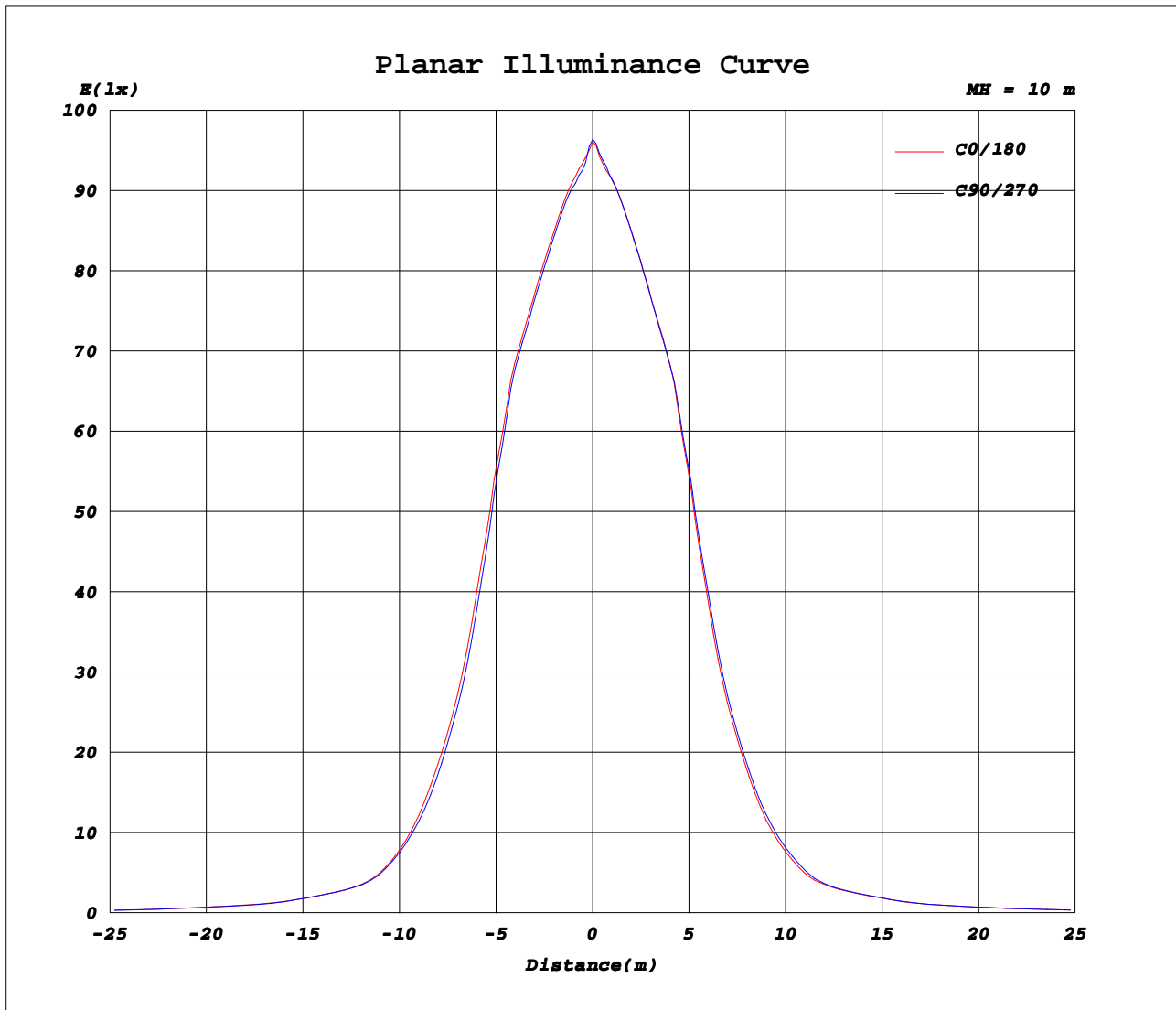
AvgL	cd/m2
L_0~180(65)av	18727
L_0~180(75)av	17728
L_0~180(85)av	15063
L_90~270(65)av	18625
L_90~270(75)av	17824
L_90~270(85)av	16844
L_45(65)av	18620
L_45(75)av	17728
L_45(85)av	15796

Standard: GB/T 29293-2012

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**Planar Illuminance Curve**



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-57K-90D-REF\_181105**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	9606	9603	9593	9602	9604	9624	9636	9614	9606	9603	9593	9603	9606	9603	9593	9602	9604	9624	9636
5	9291	9266	9237	9228	9212	9223	9203	9240	9255	9222	9209	9238	9303	9307	9331	9329	9295	9322	9308
10	9068	9052	9049	9020	8992	8991	9003	9045	9014	9013	8994	9010	9084	9095	9133	9135	9112	9094	9076
15	8860	8839	8845	8855	8771	8731	8766	8822	8793	8773	8782	8787	8836	8819	8843	8879	8871	8834	8833
20	8653	8624	8647	8656	8570	8518	8558	8596	8547	8519	8540	8584	8636	8589	8608	8683	8671	8597	8611
25	8045	7930	7927	7908	7813	7760	7846	7903	7843	7787	7792	7832	7941	7921	8006	8101	8122	8016	8023
30	6690	6555	6430	6383	6257	6240	6347	6435	6369	6330	6316	6359	6481	6461	6618	6675	6697	6625	6626
35	4950	4785	4697	4647	4575	4553	4667	4742	4691	4647	4641	4650	4751	4770	4910	4961	5014	4932	4924
40	3532	3383	3273	3234	3175	3182	3272	3342	3281	3246	3240	3251	3347	3368	3499	3579	3617	3529	3508
45	2220	2172	2119	2070	2058	2095	2133	2172	2131	2107	2092	2096	2161	2178	2304	2345	2371	2330	2311
50	1363	1347	1329	1331	1330	1333	1344	1359	1335	1337	1320	1334	1376	1388	1422	1436	1456	1442	1419
55	1137	1128	1115	1117	1115	1125	1133	1139	1132	1133	1131	1137	1156	1166	1179	1185	1193	1191	1176
60	886	881	874	872	869	871	875	879	877	878	878	880	892	896	903	904	906	902	895
65	788	780	770	768	764	769	776	782	780	780	778	782	795	801	809	810	813	806	798
70	635	627	616	614	611	617	627	634	630	629	626	629	643	650	660	662	664	657	647
75	456	448	439	438	435	442	453	460	455	453	447	449	462	469	481	483	487	479	470
80	282	277	270	272	269	278	286	293	287	285	278	278	286	292	303	305	305	302	298
85	131	126	123	124	126	135	143	146	141	138	129	125	131	137	147	148	154	151	151
90	27.7	25.5	23.4	26.3	33.0	43.4	50.4	45.5	38.2	30.7	24.8	24.9	24.1	24.3	26.2	27.8	34.9	41.3	46.0
95	20.8	20.8	19.2	20.8	25.2	30.5	33.6	32.0	25.8	20.7	19.0	21.0	15.2	14.7	12.9	12.5	12.9	15.0	16.0
100	21.1	21.0	20.7	20.9	21.3	21.6	21.8	21.5	21.1	20.7	20.7	21.0	14.7	14.3	13.8	13.4	13.4	13.7	13.9
105	23.8	24.1	24.8	25.2	25.4	26.3	26.3	25.7	24.9	25.0	25.1	24.5	17.4	17.3	17.3	16.6	16.3	17.0	17.7
110	28.0	28.3	29.0	30.2	31.5	32.1	32.1	31.6	31.1	30.1	29.3	28.8	21.2	21.0	21.1	21.5	21.9	22.8	23.2
115	33.0	33.4	34.0	35.5	36.9	38.3	38.1	37.8	36.5	35.3	34.3	34.0	26.2	26.0	26.0	26.5	27.6	29.0	29.3
120	38.4	38.9	39.1	40.8	42.4	43.8	43.9	43.4	42.1	40.8	39.2	39.3	31.7	31.4	30.7	32.3	33.2	34.5	35.1
125	44.0	44.2	44.3	45.5	48.1	49.7	49.5	49.4	48.1	45.6	44.9	44.9	37.5	37.2	36.5	37.1	39.2	40.9	41.1
130	49.6	49.8	49.7	50.8	52.8	54.1	53.9	53.8	52.7	50.9	50.0	50.6	43.4	43.3	42.2	43.0	44.6	45.8	46.0
135	54.5	54.7	55.0	55.7	56.7	57.9	57.9	57.7	56.6	55.6	55.3	55.6	49.6	48.9	48.0	48.1	49.0	50.2	50.6
140	60.0	60.2	60.6	60.5	60.6	61.0	61.3	60.8	60.2	60.1	60.7	61.2	55.7	55.1	54.1	53.4	53.4	54.0	54.7
145	64.9	65.0	64.8	64.5	64.5	64.4	64.4	64.2	63.9	64.3	64.6	65.1	60.7	60.0	59.0	58.4	57.7	58.2	58.5
150	68.0	68.0	67.7	68.1	67.8	67.6	67.6	67.3	67.3	67.5	67.6	67.9	64.4	63.7	63.0	62.6	62.1	62.1	62.4
155	70.0	70.2	70.3	70.2	70.5	70.3	70.1	70.0	70.0	69.9	70.0	70.2	67.4	66.9	66.3	65.9	65.8	65.7	65.8
160	72.0	72.2	72.2	72.4	72.6	72.8	72.5	72.4	72.3	72.0	72.1	72.1	70.1	69.6	69.2	69.0	69.1	69.2	69.2
165	74.2	74.4	74.3	74.5	74.6	74.8	74.4	74.4	74.2	74.3	74.5	74.3	73.3	72.9	72.5	72.3	72.1	72.1	72.2
170	76.4	76.4	76.2	76.4	76.8	76.8	76.5	76.5	76.3	76.6	76.7	76.5	76.0	75.8	75.5	75.0	75.0	74.7	74.8
175	77.8	77.8	77.8	78.2	78.3	78.0	77.8	77.8	77.8	78.0	78.0	77.7	78.0	77.8	77.9	77.6	77.3	77.1	76.9
180	79.0	78.9	78.8	79.1	78.8	78.5	78.4	78.4	78.5	78.6	78.3	78.1	79.1	78.8	78.9	79.1	78.8	78.5	78.4

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:219.9V I:0.5029A P:105.1W PF:0.9504 Lamp Flux:14385.4x1 lm		
NAME: HB2000-100G-C1-57K-90D-REF_181105	TYPE:LED	WEIGHT:
SPEC.:G5 288EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	9614	9606	9603	9593	9603														
5	9251	9221	9235	9237	9216														
10	9049	9044	9026	9034	9037														
15	8844	8832	8797	8808	8848														
20	8643	8614	8582	8606	8667														
25	8029	8091	8016	8114	8116														
30	6623	6681	6686	6771	6784														
35	4910	4974	4971	5057	5039														
40	3482	3538	3517	3604	3587														
45	2274	2290	2269	2292	2288														
50	1404	1417	1396	1403	1385														
55	1167	1168	1163	1158	1148														
60	889	890	889	890	888														
65	790	792	790	794	791														
70	639	641	639	643	641														
75	461	463	462	466	463														
80	291	293	289	292	288														
85	143	145	141	140	135														
90	40.1	35.0	28.1	25.6	23.1														
95	13.4	12.4	12.4	13.2	15.0														
100	13.9	13.6	13.6	14.2	14.6														
105	17.4	16.6	17.0	17.0	16.8														
110	23.2	22.4	21.7	20.8	20.4														
115	29.4	27.7	26.5	25.4	25.2														
120	35.0	33.5	32.2	30.4	30.5														
125	41.1	39.8	37.3	35.8	36.0														
130	46.0	44.6	42.5	41.5	41.9														
135	50.4	49.1	47.9	47.2	47.3														
140	54.1	53.5	53.4	53.2	53.5														
145	58.3	58.1	58.1	58.5	59.0														
150	62.2	62.2	62.3	62.3	62.8														
155	65.8	65.8	65.5	65.6	65.9														
160	69.2	68.9	68.7	68.5	68.7														
165	72.3	72.0	71.7	71.6	71.7														
170	75.0	74.8	74.4	74.3	74.4														
175	77.0	77.2	77.0	76.6	76.6														
180	78.3	78.5	78.5	78.3	78.1														

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**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	9606	9603	9593	9602	9604	9624	9636	9614	9606	9603
3.0	9376	9361	9311	9300	9311	9301	9293	9346	9365	9351
6.0	9257	9257	9214	9220	9183	9184	9183	9207	9218	9199
9.0	9125	9107	9084	9070	9034	9057	9060	9086	9069	9081
12.0	8969	8951	8958	8950	8908	8871	8903	8953	8919	8905
15.0	8860	8839	8845	8855	8771	8731	8766	8822	8793	8773
18.0	8730	8710	8722	8735	8656	8620	8629	8686	8647	8619
21.0	8615	8587	8621	8621	8530	8463	8517	8561	8504	8469
24.0	8263	8141	8138	8120	8030	7983	8096	8159	8084	8016
27.0	7629	7513	7403	7380	7273	7283	7369	7466	7376	7348
30.0	6690	6555	6430	6383	6257	6240	6347	6435	6369	6330
33.0	5576	5421	5310	5264	5168	5144	5260	5355	5294	5251
36.0	4643	4486	4404	4361	4295	4285	4383	4461	4409	4364
39.0	3813	3663	3560	3516	3445	3449	3540	3614	3560	3522
42.0	2965	2857	2740	2720	2693	2715	2787	2837	2788	2757
45.0	2220	2172	2119	2070	2058	2095	2133	2172	2131	2107
48.0	1614	1574	1544	1532	1511	1533	1568	1604	1555	1546
51.0	1301	1278	1277	1269	1264	1274	1291	1288	1284	1276
54.0	1174	1168	1159	1162	1161	1170	1174	1178	1172	1173
57.0	1028	1018	998.7	997.1	992.1	1006	1017	1025	1016	1020
60.0	886.3	880.7	874.5	871.9	868.8	870.5	874.7	878.8	877.0	878.0
63.0	826.0	829.9	822.8	819.6	817.2	819.9	825.0	828.5	827.7	828.3
66.0	758.9	750.9	741.6	738.9	735.1	740.2	748.2	755.1	751.9	751.5
69.0	668.1	660.0	649.7	646.8	643.7	649.5	658.8	665.6	662.4	661.7
72.0	565.3	557.0	547.1	545.0	541.7	548.3	559.0	566.2	561.8	560.1
75.0	455.6	448.2	438.7	437.9	434.7	442.1	452.7	460.2	454.9	452.6
78.0	348.4	342.2	334.9	335.0	332.4	339.3	349.4	356.3	351.2	348.2
81.0	250.1	245.8	239.1	240.3	239.4	247.4	255.5	261.9	256.0	253.2
84.0	158.8	154.9	150.2	153.0	153.0	161.7	169.6	173.6	169.1	165.6
87.0	78.39	74.38	69.71	71.04	74.59	84.21	92.34	94.15	89.00	83.82
90.0	27.71	25.52	23.35	26.27	32.97	43.43	50.37	45.49	38.16	30.71
93.0	19.66	19.12	18.41	21.50	27.33	35.20	39.51	36.26	28.15	21.24
96.0	21.16	21.54	19.66	19.74	23.22	27.50	29.81	28.83	24.11	19.79
99.0	20.99	20.88	20.53	20.38	20.74	21.18	21.94	21.53	20.48	20.17
102.0	22.06	21.92	22.00	22.29	22.56	23.05	23.34	22.80	22.46	22.21
105.0	23.81	24.08	24.78	25.22	25.39	26.26	26.34	25.74	24.92	25.04
108.0	26.28	26.51	27.29	28.21	29.12	29.79	29.79	29.31	28.70	28.18
111.0	28.97	29.32	29.97	31.20	32.64	33.28	33.29	32.73	32.28	31.09
114.0	31.97	32.41	33.01	34.30	35.82	36.99	36.83	36.49	35.52	34.17
117.0	35.14	35.52	35.95	37.75	39.07	40.32	40.57	39.98	38.74	37.63
120.0	38.39	38.90	39.15	40.77	42.42	43.77	43.89	43.39	42.11	40.76
123.0	41.87	42.16	42.18	43.57	45.82	47.44	47.28	47.04	45.68	43.57
126.0	45.15	45.24	45.39	46.61	49.12	50.63	50.48	50.38	49.15	46.71
129.0	48.47	48.71	48.63	49.77	51.91	53.23	53.08	53.01	51.92	49.88
132.0	51.72	51.80	51.78	52.66	54.35	55.72	55.60	55.44	54.28	52.77
135.0	54.52	54.71	55.02	55.66	56.70	57.94	57.89	57.72	56.62	55.61
138.0	57.93	58.01	58.36	58.49	58.91	60.04	60.12	59.97	58.62	58.29
141.0	60.96	61.21	61.61	61.26	61.41	61.71	61.71	61.49	61.02	60.94
144.0	64.04	64.31	64.10	63.80	63.57	63.82	63.73	63.53	63.14	63.54
147.0	66.25	66.30	66.08	66.03	65.90	65.66	65.68	65.40	65.39	65.68
150.0	68.03	68.02	67.71	68.05	67.79	67.57	67.61	67.26	67.30	67.50
153.0	69.26	69.37	69.28	69.39	69.43	69.24	69.16	68.91	69.01	69.03
156.0	70.39	70.73	70.62	70.61	70.92	70.84	70.63	70.49	70.56	70.34
159.0	71.66	71.79	71.71	71.90	72.22	72.37	72.06	71.97	71.91	71.55
162.0	72.77	72.99	72.97	73.20	73.28	73.46	73.34	73.20	72.92	72.98
165.0	74.24	74.35	74.33	74.47	74.61	74.77	74.42	74.38	74.23	74.35
168.0	75.64	75.67	75.54	75.59	75.98	76.13	75.77	75.66	75.60	75.58
171.0	76.68	76.71	76.54	76.79	77.17	77.04	76.71	76.69	76.72	76.98
174.0	77.44	77.50	77.50	77.88	78.04	77.85	77.57	77.61	77.52	77.77
177.0	78.32	78.38	78.32	78.69	78.70	78.43	78.23	78.18	78.25	78.43
180.0	78.99	78.91	78.83	79.12	78.78	78.55	78.36	78.38	78.45	78.55
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	9593	9603	9606	9603	9593	9602	9604	9624	9636	9614
3.0	9315	9297	9379	9361	9336	9328	9384	9415	9419	9401
6.0	9214	9210	9264	9243	9263	9277	9274	9273	9275	9217
9.0	9050	9072	9143	9148	9197	9168	9179	9156	9137	9092
12.0	8894	8912	8963	8969	8997	9021	9014	8974	8982	8964
15.0	8782	8787	8836	8819	8843	8879	8871	8834	8833	8844
18.0	8644	8666	8698	8679	8708	8775	8748	8698	8687	8718
21.0	8503	8524	8594	8548	8564	8638	8641	8556	8572	8616
24.0	8026	8061	8189	8185	8281	8382	8403	8287	8275	8282
27.0	7298	7345	7494	7494	7597	7678	7682	7633	7616	7618
30.0	6316	6359	6481	6461	6618	6675	6697	6625	6626	6623

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**

**Photometric Data Table [cd]**

33.0	5232	5247	5374	5386	5541	5591	5640	5551	5554	5543
36.0	4358	4368	4466	4480	4614	4666	4723	4635	4630	4617
39.0	3521	3533	3634	3654	3774	3853	3899	3806	3797	3767
42.0	2738	2742	2817	2840	2973	3027	3078	3005	2988	2962
45.0	2092	2096	2161	2178	2304	2345	2371	2330	2311	2274
48.0	1528	1534	1583	1643	1701	1726	1754	1734	1703	1676
51.0	1277	1277	1307	1325	1339	1351	1367	1354	1339	1328
54.0	1173	1180	1195	1201	1212	1221	1227	1224	1212	1205
57.0	1015	1020	1041	1050	1075	1083	1092	1080	1059	1051
60.0	877.7	880.2	891.9	896.4	902.8	904.3	906.2	902.2	894.9	889.0
63.0	828.6	830.7	842.6	845.7	851.4	851.6	853.8	848.9	843.0	836.4
66.0	750.3	753.6	767.5	772.7	781.6	782.8	785.2	778.0	769.7	762.1
69.0	659.2	662.0	676.6	682.7	692.4	693.6	696.1	688.4	679.9	671.2
72.0	556.5	558.9	573.4	579.6	591.1	592.9	596.0	587.7	578.7	569.3
75.0	447.4	449.3	462.0	469.1	480.7	483.3	486.5	478.8	470.0	461.0
78.0	342.7	343.1	353.0	359.7	371.0	372.9	375.5	369.9	363.8	356.1
81.0	246.6	246.1	253.7	259.7	270.4	270.8	273.4	268.4	266.7	259.5
84.0	156.8	153.6	160.5	165.8	176.5	177.2	183.0	179.3	177.8	171.0
87.0	75.27	71.94	76.84	81.96	90.52	93.42	99.97	99.95	98.46	91.03
90.0	24.76	24.91	24.12	24.29	26.20	27.77	34.85	41.31	45.98	40.12
93.0	18.49	19.65	14.61	13.72	12.52	13.11	18.93	27.07	30.62	24.40
96.0	19.39	21.52	15.31	15.32	13.08	12.55	12.35	12.65	13.07	12.73
99.0	20.33	20.61	14.55	14.45	13.56	13.11	12.94	13.28	13.52	13.51
102.0	22.31	22.31	15.66	15.44	14.88	14.40	14.42	14.75	15.08	15.03
105.0	25.08	24.46	17.39	17.32	17.27	16.65	16.28	17.03	17.68	17.44
108.0	27.56	26.89	19.47	19.26	19.47	19.59	19.30	20.41	20.87	20.82
111.0	30.27	29.78	22.15	21.91	21.91	22.42	23.17	23.98	24.42	24.43
114.0	33.34	32.92	25.17	24.97	24.93	25.43	26.70	27.69	28.10	28.10
117.0	36.16	36.03	28.39	28.09	27.78	28.83	29.70	31.15	31.85	31.53
120.0	39.17	39.30	31.70	31.42	30.74	32.28	33.15	34.54	35.15	35.00
123.0	42.41	42.70	35.14	34.90	34.01	35.13	36.79	38.36	38.80	38.74
126.0	46.01	46.04	38.70	38.37	37.77	38.43	40.41	42.01	42.20	42.22
129.0	48.99	49.55	42.23	42.11	40.99	41.73	43.63	44.89	45.11	45.07
132.0	52.10	52.53	45.87	45.53	44.51	44.90	46.35	47.70	47.91	47.87
135.0	55.29	55.63	49.61	48.94	47.99	48.14	48.98	50.25	50.56	50.40
138.0	58.70	59.03	53.25	52.63	51.68	51.41	51.50	52.82	53.06	52.90
141.0	61.52	62.10	56.81	56.23	55.18	54.57	54.34	54.83	55.17	54.99
144.0	63.86	64.48	59.79	59.19	58.13	57.49	56.96	57.38	57.62	57.49
147.0	65.86	66.35	62.37	61.58	60.75	60.26	59.67	59.70	60.00	59.80
150.0	67.60	67.86	64.38	63.66	63.00	62.60	62.14	62.11	62.36	62.18
153.0	69.19	69.35	66.13	65.63	65.09	64.60	64.35	64.25	64.49	64.39
156.0	70.38	70.51	67.98	67.41	66.80	66.51	66.53	66.41	66.51	66.56
159.0	71.65	71.65	69.57	69.01	68.63	68.38	68.53	68.54	68.56	68.61
162.0	73.03	72.91	71.34	70.86	70.59	70.37	70.26	70.34	70.40	70.37
165.0	74.45	74.34	73.31	72.88	72.53	72.27	72.07	72.05	72.16	72.29
168.0	75.84	75.78	75.12	74.75	74.40	73.97	73.77	73.72	73.86	73.99
171.0	77.05	76.80	76.48	76.24	76.07	75.61	75.42	75.24	75.24	75.37
174.0	77.73	77.44	77.60	77.46	77.49	77.17	76.88	76.68	76.52	76.64
177.0	78.28	78.07	78.73	78.47	78.59	78.39	78.05	77.82	77.68	77.68
180.0	78.29	78.14	79.10	78.84	78.90	79.06	78.82	78.51	78.39	78.33
G/C	300.0	315.0	330.0	345.0						
0.0	9606	9603	9593	9603						
3.0	9358	9282	9281	9296						
6.0	9189	9198	9192	9193						
9.0	9092	9087	9090	9088						
12.0	8948	8919	8929	8951						
15.0	8832	8797	8808	8848						
18.0	8708	8673	8690	8718						
21.0	8584	8539	8574	8631						
24.0	8349	8271	8372	8358						
27.0	7675	7646	7734	7729						
30.0	6681	6686	6771	6784						
33.0	5607	5611	5707	5703						
36.0	4681	4663	4751	4743						
39.0	3820	3805	3897	3878						
42.0	3012	2972	3037	3020						
45.0	2290	2269	2292	2288						
48.0	1690	1662	1682	1659						
51.0	1333	1337	1323	1318						
54.0	1204	1197	1192	1182						
57.0	1054	1052	1053	1042						
60.0	889.7	888.6	890.0	887.7						
63.0	837.4	835.6	837.6	835.4						
66.0	763.9	761.8	765.4	763.3						

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

**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: HB2000-100G-C1-57K-90D-REF\_181105**



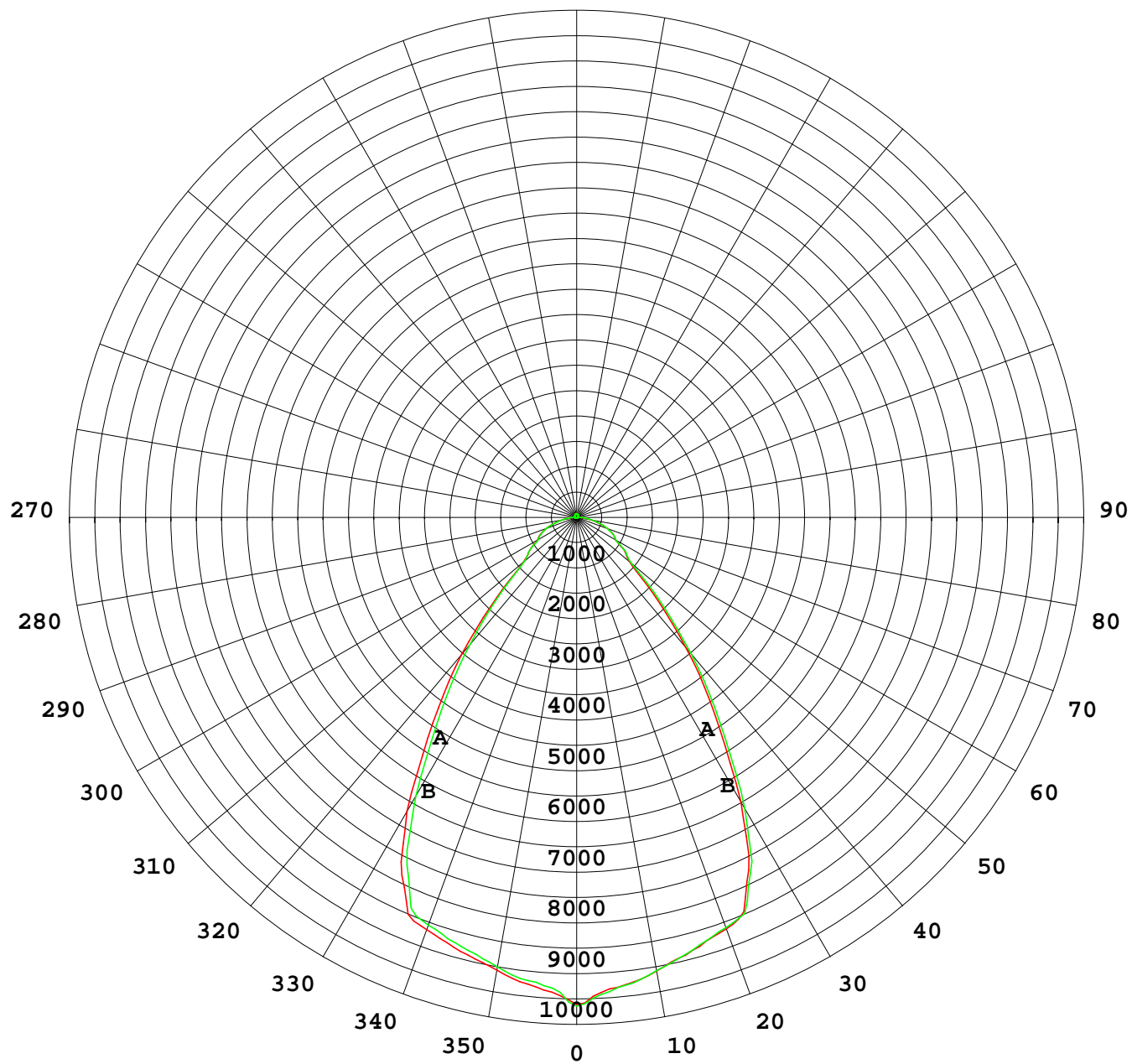
**Photometric Data Table [cd]**

69.0	673.6	671.8	675.8	672.9
72.0	572.0	570.0	574.5	571.6
75.0	463.2	461.5	465.6	462.6
78.0	357.8	355.1	358.2	354.8
81.0	262.1	257.7	260.7	255.9
84.0	173.1	168.7	169.5	162.6
87.0	90.85	86.92	85.27	79.89
90.0	34.96	28.15	25.63	23.14
93.0	18.25	12.64	12.74	13.94
96.0	12.44	12.57	13.56	15.55
99.0	13.17	13.26	14.20	15.05
102.0	14.70	14.52	14.81	15.25
105.0	16.63	17.04	17.03	16.76
108.0	19.89	19.90	19.27	18.84
111.0	23.57	22.54	21.59	21.28
114.0	26.74	25.43	24.46	24.19
117.0	29.95	28.78	27.41	27.27
120.0	33.48	32.21	30.39	30.48
123.0	37.24	35.19	33.52	33.74
126.0	40.87	38.33	36.77	37.02
129.0	43.77	41.56	40.36	40.61
132.0	46.43	44.58	43.72	44.09
135.0	49.05	47.90	47.17	47.31
138.0	51.58	51.16	50.87	51.01
141.0	54.42	54.30	54.62	54.57
144.0	57.09	57.23	57.62	58.12
147.0	59.69	59.87	60.13	60.63
150.0	62.19	62.35	62.29	62.84
153.0	64.35	64.27	64.35	64.74
156.0	66.48	66.10	66.24	66.54
159.0	68.27	67.99	67.87	68.15
162.0	70.11	69.91	69.66	69.84
165.0	71.99	71.72	71.58	71.71
168.0	73.72	73.32	73.29	73.38
171.0	75.40	75.02	74.72	74.81
174.0	76.75	76.46	76.20	76.10
177.0	77.82	77.76	77.48	77.42
180.0	78.48	78.53	78.31	78.13

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 03 January 2018**

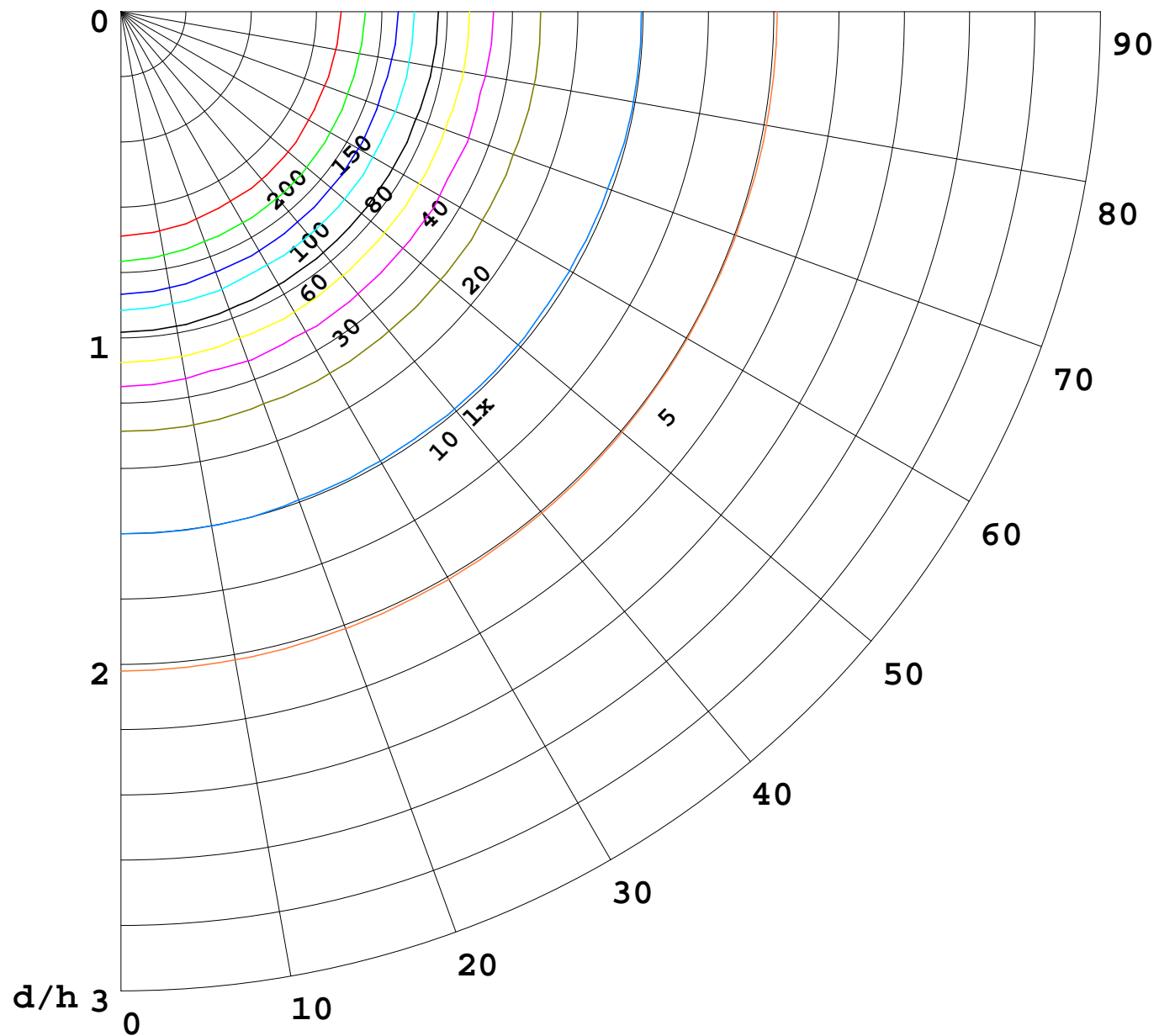
**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=1.0000]**  
**Remarks: HB2000-100G-C1-57K-90D-REF\_181105**

I(cd)



1000 lm

$K = 1$



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

	<b><math>P_{cc}</math></b>	<b><math>P_w</math></b>	<b><math>P_{fc}</math></b>
—————	70	50	30
—————	50	30	20

