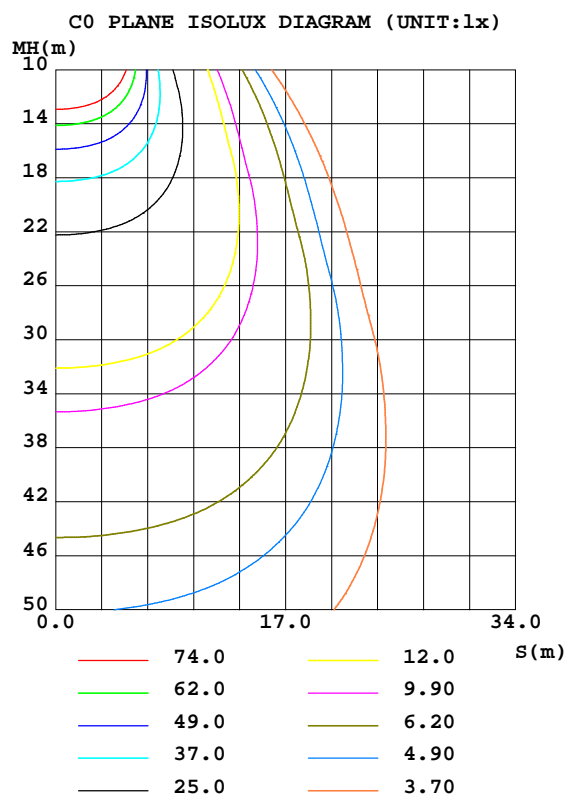
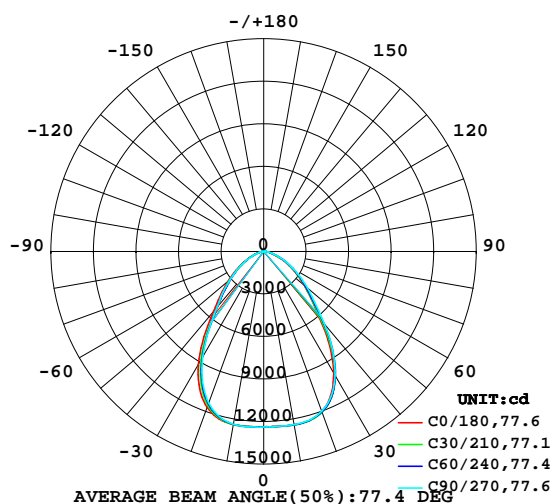


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 154.88 lm/W			
MODEIHB2210-150S-57K_200218		Imax(cd)	12436	S/MH(C0/180)	1.10
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.06
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	22710	$\eta$ UP,DN(C0-180)	0.7,52.2
NOMINAL FLUX(lm)	22709.9	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.8,46.3
LAMPS INSIDE	1	$\eta$ up(%)	1.5	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220	$\eta$ down(%)	98.5	CIBSE SHR MAX	1.15

**LUMINOUS INTENSITY DISTRIBUTION DIAGRAM**



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: HB2210-150S-57K\_200218

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1242	1242	1240	1241	1240	1238	1237	1241	0- 10	1184	1184	5.21,5.21
20	1200	1206	1199	1188	1169	1149	1137	1165	10- 20	3446	4630	20.4,20.4
30	988.0	1014	1008	971.7	921.2	872.6	862.8	911.4	20- 30	4946	9575	42.2,42.2
40	611.6	649.6	664.1	610.5	549.7	501.9	512.3	548.0	30- 40	4753	14328	63.1,63.1
50	375.0	377.5	405.7	369.0	328.9	297.3	309.8	336.8	40- 50	3495	17823	78.5,78.5
60	218.8	219.5	238.0	211.1	182.1	161.9	167.6	189.5	50- 60	2423	20246	89.2,89.2
70	99.50	107.3	113.9	95.54	75.65	66.93	66.59	79.49	60- 70	1397	21643	95.3,95.3
80	31.06	36.42	38.89	31.30	23.36	20.15	19.51	23.79	70- 80	572.0	22215	97.8,97.8
90	3.200	2.916	7.343	3.338	4.514	5.131	5.185	4.242	80- 90	153.6	22369	98.5,98.5
100	1.846	1.831	1.817	1.806	2.830	2.806	2.851	2.642	90-100	27.35	22396	98.6,98.6
110	2.701	2.933	3.497	2.993	4.028	4.111	4.188	3.926	100-110	30.77	22427	98.8,98.8
120	4.030	4.032	4.379	4.287	5.523	5.713	5.902	5.521	110-120	41.62	22469	98.9,98.9
130	5.472	5.367	5.918	5.653	7.074	7.195	7.633	6.957	120-130	50.71	22519	99.2,99.2
140	6.951	6.879	7.002	7.006	8.555	8.583	8.735	8.358	130-140	54.82	22574	99.4,99.4
150	8.312	8.216	8.199	8.444	9.700	9.630	9.656	9.468	140-150	52.31	22626	99.6,99.6
160	9.402	9.339	9.452	9.507	10.48	10.48	10.48	10.32	150-160	43.58	22670	99.8,99.8
170	10.54	10.50	10.51	10.64	11.17	11.15	11.05	10.99	160-170	29.34	22699	100,100
180	11.34	11.43	11.33	11.39	11.34	11.43	11.32	11.39	170-180	10.55	22710	100,100
DEG	LUMINOUS INTENSITY:≠10cd									UNIT:lm		

**Conical surface Flux(90deg): 16216 lm**

**%lum = 71.4%**

**%lamp = 71.4%**

**Conical surface Flux(120deg): 20246 lm**

**%lum = 89.2%**

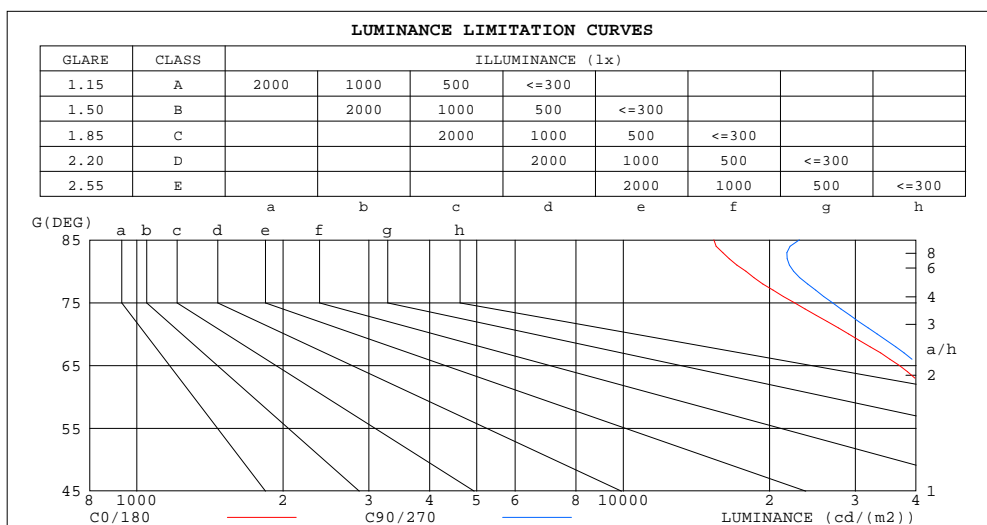
**%lamp = 89.2%**

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**LUMINANCE LIMITATION CURVES**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	15358	23039
80	17889	22397
75	22478	26903
70	29092	33299
65	36952	40654
60	43759	47603
55	50728	54842
50	58346	63108
45	67283	72536

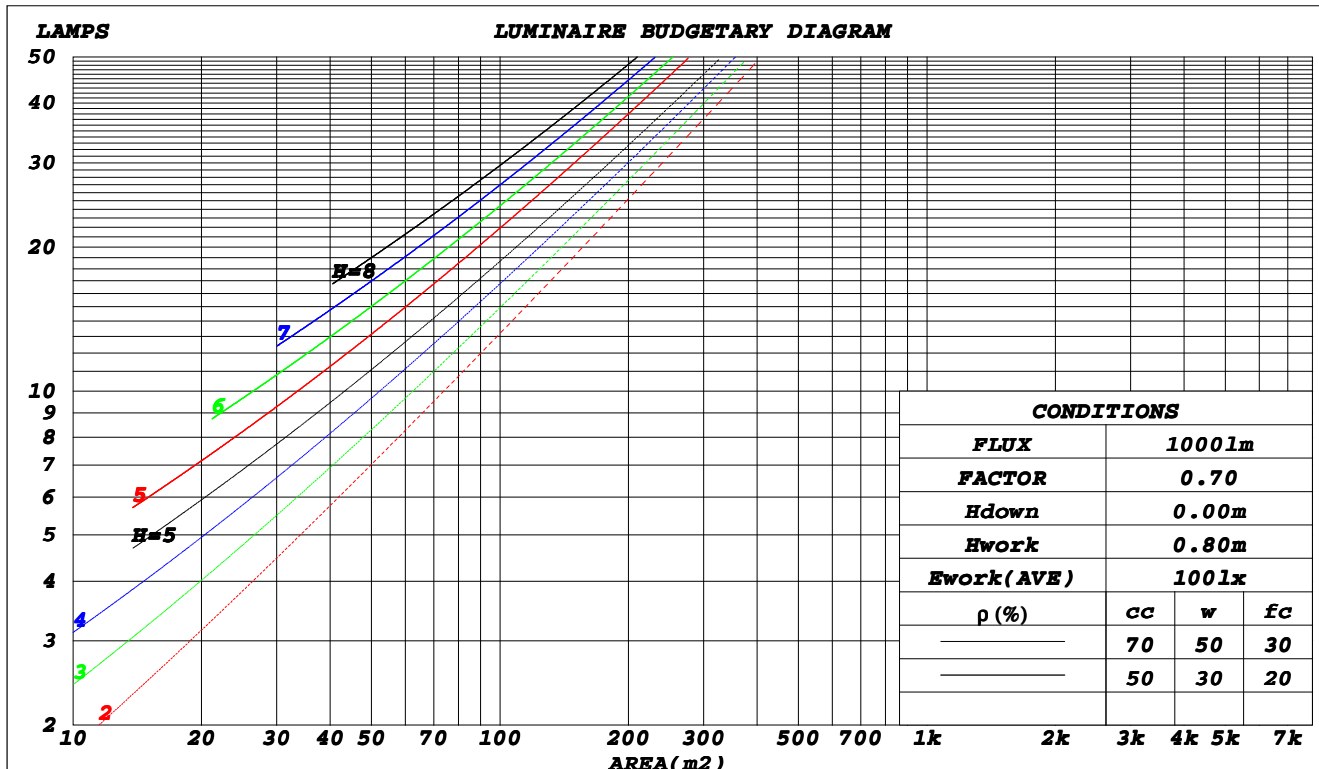
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	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	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	1.07	1.03	1.00	1.05	1.01	.99	1.00	.98	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.96	.90	.86	.94	.89	.85	.90	.86	.83	.87	.84	.80	.84	.81	.79	.77
3.0	.86	.80	.74	.85	.79	.74	.82	.77	.72	.79	.75	.71	.76	.73	.69	.67
4.0	.78	.71	.65	.77	.70	.65	.74	.68	.64	.72	.67	.63	.70	.65	.62	.60
5.0	.71	.64	.58	.70	.63	.58	.68	.62	.57	.66	.60	.56	.64	.59	.55	.54
6.0	.65	.57	.52	.64	.57	.52	.62	.56	.51	.61	.55	.51	.59	.54	.50	.48
7.0	.60	.52	.47	.59	.52	.47	.58	.51	.46	.56	.50	.46	.55	.49	.45	.44
8.0	.55	.48	.43	.55	.47	.42	.53	.47	.42	.52	.46	.42	.51	.45	.41	.40
9.0	.51	.44	.39	.51	.44	.39	.49	.43	.39	.48	.43	.38	.47	.42	.38	.36
10.0	.48	.41	.36	.47	.40	.36	.46	.40	.36	.45	.39	.35	.44	.39	.35	.34



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: HB2210-150S-57K\_200218

**WEC AND CCEC**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	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	.245	.139	.044	.237	.135	.043	.224	.128	.041	.211	.122	.039	.199	.116	.037		
2.0	.235	.129	.040	.229	.126	.039	.217	.121	.037	.206	.115	.036	.196	.111	.035		
3.0	.222	.118	.035	.217	.116	.035	.206	.112	.034	.196	.108	.033	.187	.104	.032		
4.0	.209	.108	.032	.204	.107	.032	.195	.103	.031	.186	.100	.030	.178	.097	.029		
5.0	.196	.100	.029	.192	.098	.029	.183	.096	.028	.176	.093	.028	.169	.090	.027		
6.0	.184	.092	.026	.180	.091	.026	.173	.089	.026	.166	.086	.025	.160	.084	.025		
7.0	.174	.086	.024	.170	.085	.024	.164	.083	.024	.157	.081	.023	.152	.079	.023		
8.0	.164	.080	.023	.161	.079	.022	.155	.077	.022	.149	.076	.022	.144	.074	.022		
9.0	.155	.075	.021	.152	.074	.021	.147	.073	.021	.142	.071	.020	.137	.070	.020		
10.0	.147	.070	.020	.144	.070	.019	.140	.068	.019	.135	.067	.019	.131	.066	.019		

$\rho_{cc}$	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	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.187	.168	.151	.160	.144	.130	.110	.099	.090	.063	.057	.052	.020	.019	.017	
2.0	.176	.144	.116	.151	.124	.101	.103	.086	.070	.060	.050	.041	.019	.016	.013	
3.0	.167	.126	.093	.143	.108	.080	.098	.075	.056	.057	.044	.033	.018	.014	.011	
4.0	.159	.112	.076	.136	.097	.066	.094	.067	.047	.054	.039	.028	.017	.013	.009	
5.0	.151	.101	.064	.130	.087	.056	.089	.061	.039	.052	.036	.023	.017	.012	.008	
6.0	.144	.092	.055	.124	.080	.048	.085	.056	.034	.050	.033	.020	.016	.011	.007	
7.0	.138	.085	.048	.118	.074	.042	.082	.052	.030	.048	.031	.018	.015	.010	.006	
8.0	.132	.079	.043	.113	.069	.038	.079	.048	.027	.046	.029	.016	.015	.009	.005	
9.0	.126	.074	.039	.109	.065	.034	.075	.045	.024	.044	.027	.015	.014	.009	.005	
10.0	.121	.070	.036	.105	.061	.032	.073	.043	.022	.042	.025	.013	.014	.008	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: HB2210-150S-57K\_200218

**UGR(Unified Glare Rating) Table**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm											
NAME: HB2210-150S-57K_200218					TYPE:LED			WEIGHT:			
SPEC.:HB2210-150S-57K_200218					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	25.8	27.1	26.1	27.3	27.5	26.1	27.4	26.4	27.6	27.8	
	3H	26.5	27.7	26.8	27.9	28.2	26.9	28.0	27.2	28.3	28.5
	4H	26.7	27.8	27.0	28.1	28.3	27.1	28.2	27.4	28.5	28.7
	6H	26.8	27.8	27.1	28.1	28.4	27.2	28.3	27.6	28.5	28.8
	8H	26.8	27.8	27.1	28.1	28.4	27.3	28.3	27.6	28.6	28.9
12H	26.8	27.7	27.2	28.1	28.4	27.3	28.2	27.6	28.5	28.9	
4H	2H	26.2	27.3	26.5	27.5	27.8	26.4	27.5	26.7	27.8	28.0
	3H	27.0	28.0	27.4	28.3	28.6	27.3	28.3	27.7	28.6	28.9
	4H	27.3	28.1	27.7	28.5	28.8	27.6	28.5	28.0	28.8	29.2
	6H	27.4	28.2	27.8	28.6	28.9	27.8	28.6	28.2	29.0	29.4
	8H	27.5	28.2	27.9	28.6	29.0	27.9	28.6	28.3	29.0	29.4
12H	27.5	28.1	27.9	28.5	29.0	28.0	28.6	28.4	29.0	29.5	
8H	4H	27.3	28.1	27.8	28.4	28.8	27.7	28.4	28.1	28.8	29.2
	6H	27.6	28.2	28.0	28.6	29.0	28.0	28.6	28.4	29.0	29.4
	8H	27.7	28.2	28.1	28.6	29.1	28.1	28.6	28.6	29.1	29.5
	12H	27.7	28.2	28.2	28.6	29.1	28.2	28.7	28.7	29.1	29.6
	12H	4H	27.3	28.0	27.8	28.4	28.8	27.7	28.3	28.1	28.7
6H	27.6	28.1	28.1	28.6	29.0	28.0	28.5	28.5	28.9	29.4	
8H	27.7	28.1	28.2	28.6	29.1	28.1	28.6	28.6	29.0	29.5	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.7					+ 0.4 / - 0.6					
1.5H	+ 0.4 / - 0.4					+ 0.4 / - 0.3					
2.0H	+ 0.7 / - 0.7					+ 0.8 / - 0.6					

CIE Pub.117 Corrected 22710 lm Total Lamp Luminous Flux.(8log(F/F0) = 10.8)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LUC  
Test Date:17 Feb 2020

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: HB2210-150S-57K\_200218

**UTILIZATION FACTORS TABLE**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

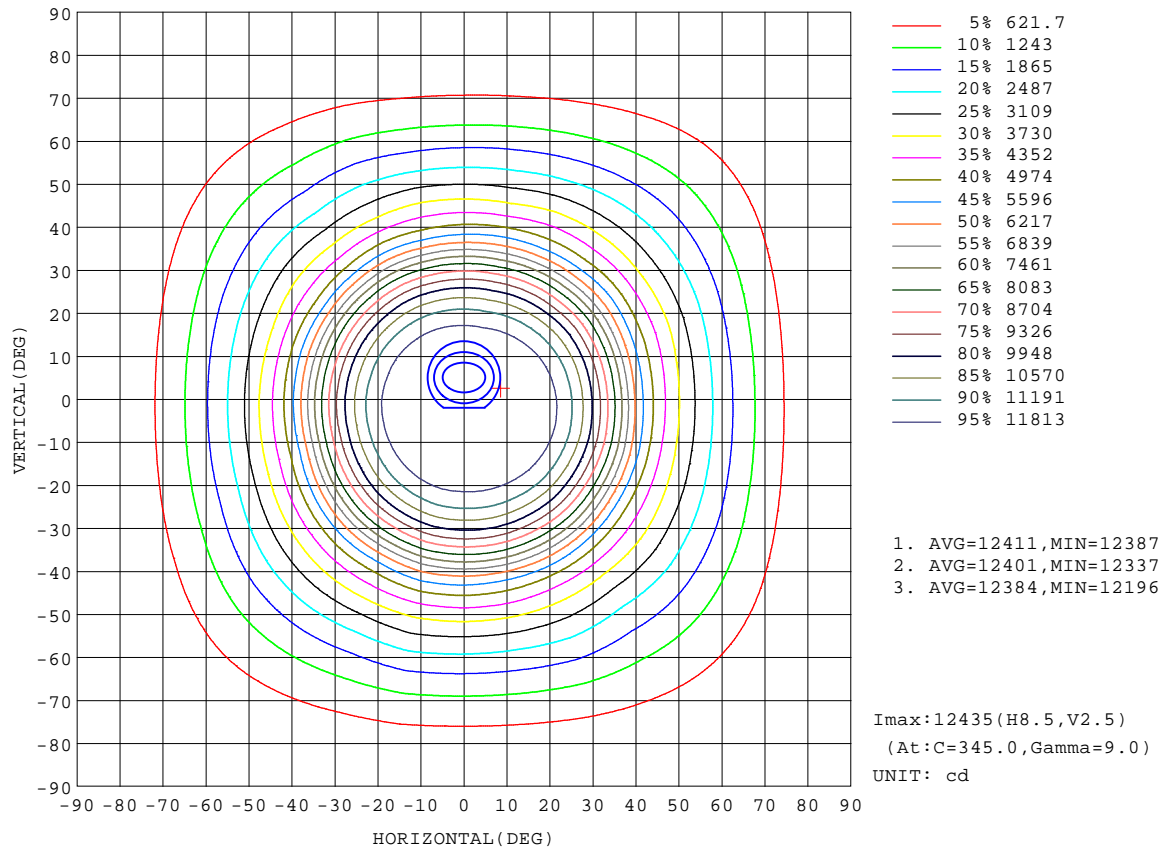
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	59	53	68	59	53	67	58	53	47
0.80	78	69	63	77	68	62	75	67	62	56
1.00	85	76	71	84	76	70	82	76	70	64
1.25	91	83	78	90	82	77	87	81	76	70
1.50	96	88	82	94	87	82	91	85	81	74
2.00	101	94	89	99	93	88	96	91	87	80
2.50	104	98	93	102	96	92	98	94	90	82
3.00	106	101	97	104	99	96	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	88
5.00	111	107	104	109	105	103	104	102	99	90
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:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: HB2210-150S-57K\_200218

**ISOCANDELA DIAGRAM**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



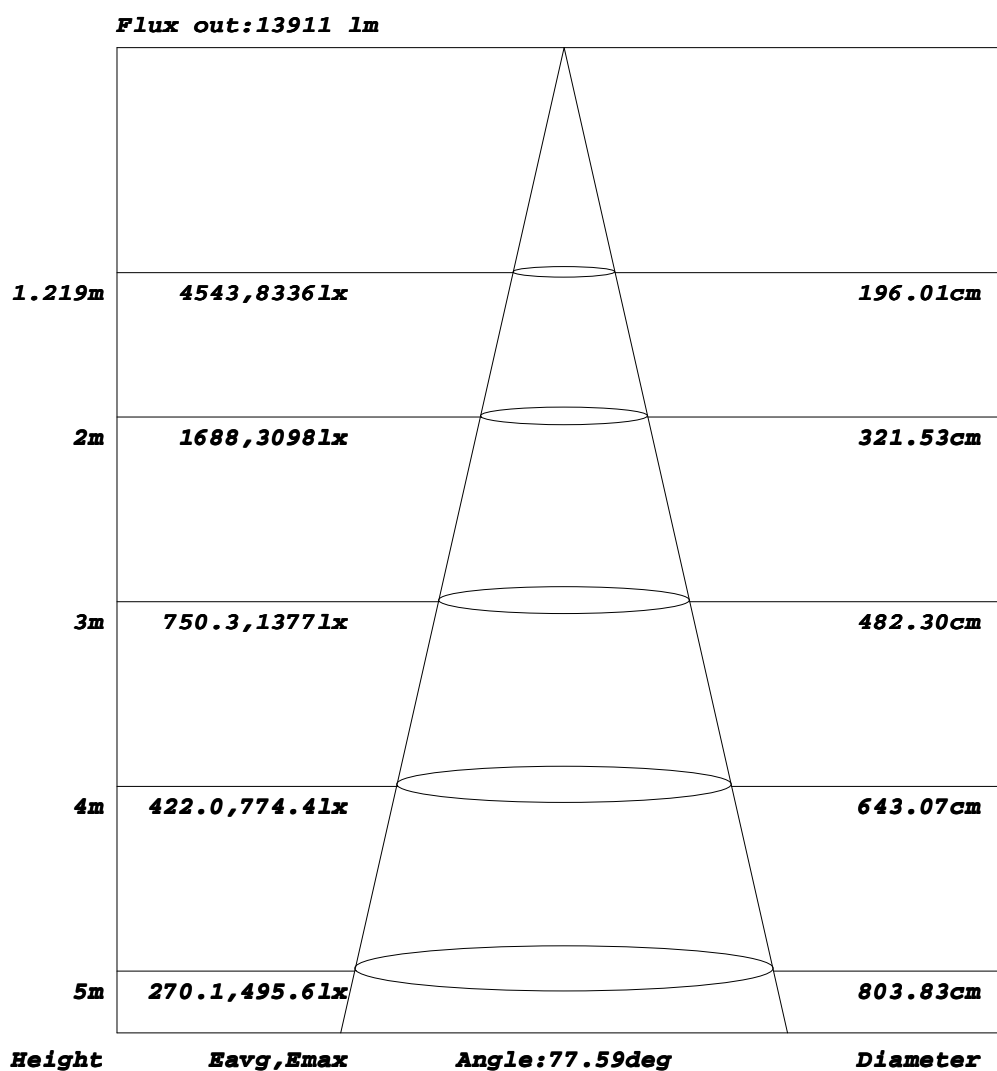
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**



**AAI Figure**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



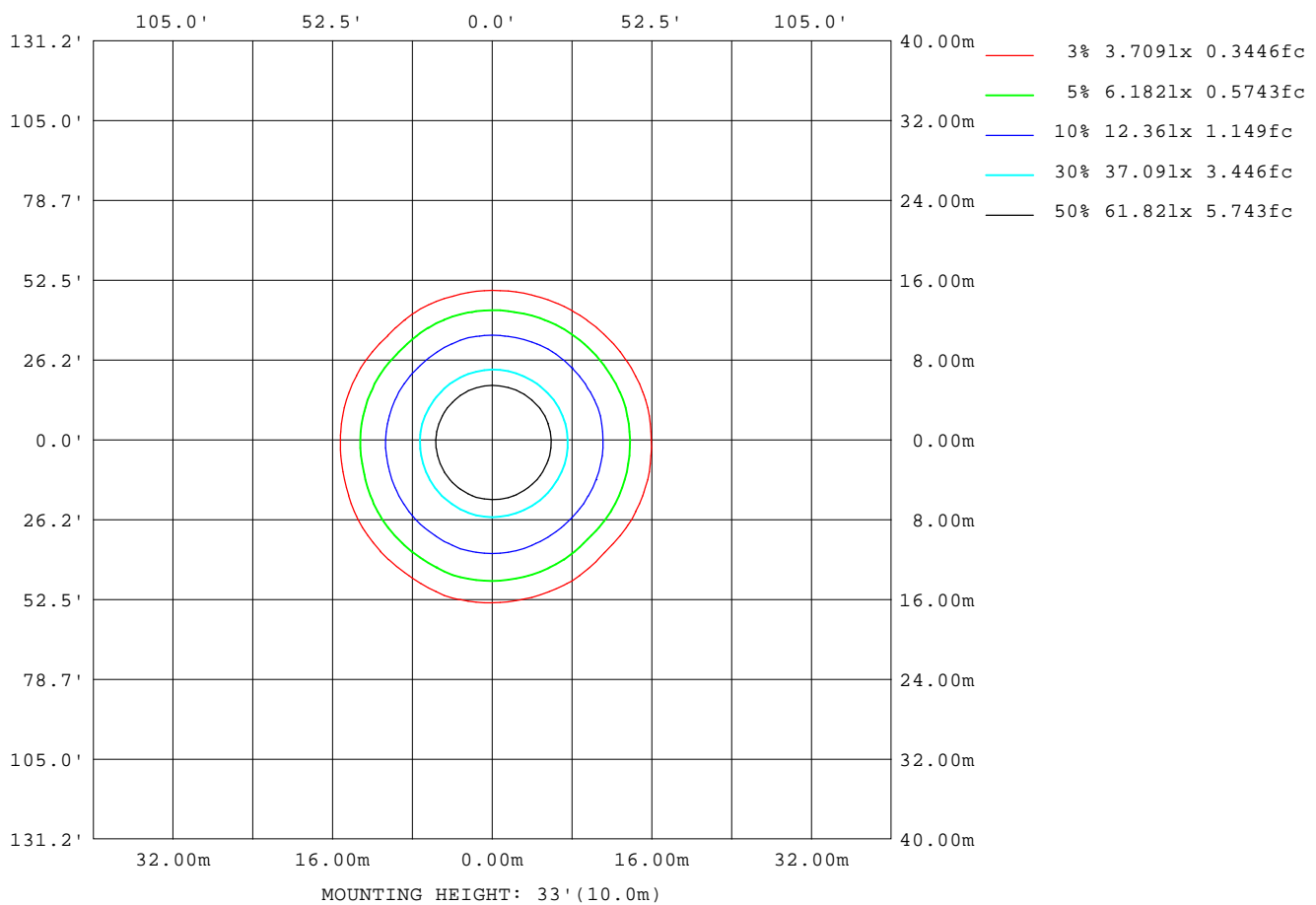
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**ISOLUX DIAGRAM**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	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:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**LED Avg.L Report**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

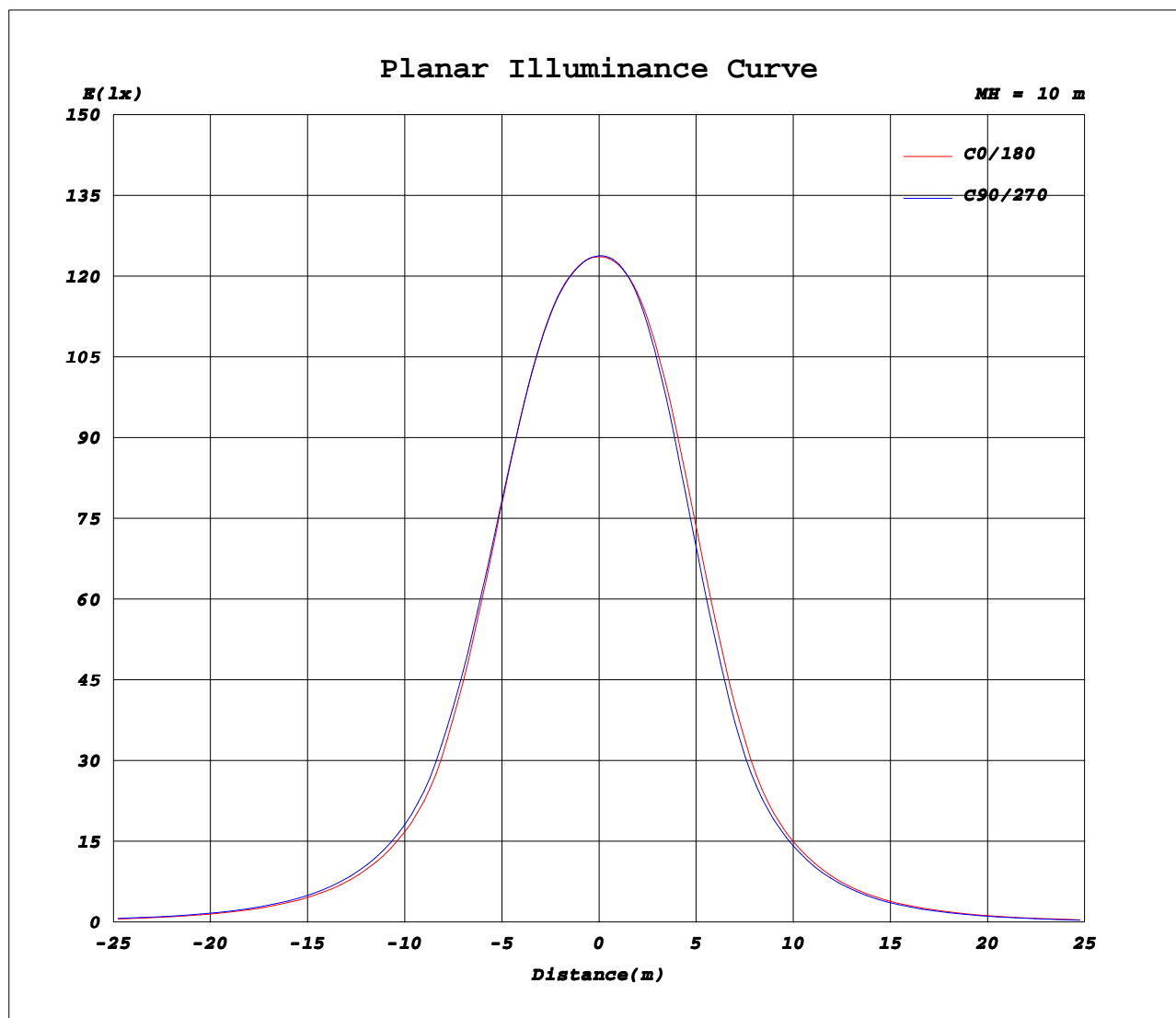
AvgL	cd/m2
L_0~180(65)av	33023
L_0~180(75)av	19649
L_0~180(85)av	13695
L_90~270(65)av	33352
L_90~270(75)av	20672
L_90~270(85)av	16472
L_45(65)av	32392
L_45(75)av	19897
L_45(85)av	14655

Standard: GB/T 29293-2012

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

# Planar Illuminance Curve



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm																		
NAME: HB2210-150S-57K_200218									TYPE:LED					WEIGHT:				
SPEC.:HB2210-150S-57K_200218									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	1236	1237	1237	1237	1237	1238	1238	1239	1239	1239	1239	1239	1236	1237	1237	1237	1237	1238	1238
5	1239	1238	1238	1237	1238	1238	1238	1239	1239	1240	1240	1241	1239	1240	1239	1240	1240	1241	1241
10	1242	1242	1242	1242	1241	1241	1240	1240	1241	1241	1242	1241	1240	1239	1239	1238	1238	1237	1237
15	1235	1237	1238	1237	1235	1234	1233	1233	1231	1229	1227	1224	1222	1219	1216	1213	1211	1207	1206
20	1200	1204	1207	1206	1203	1202	1199	1199	1193	1188	1180	1174	1169	1161	1156	1149	1144	1139	1137
25	1121	1132	1135	1137	1132	1131	1127	1125	1115	1104	1087	1075	1068	1055	1044	1034	1029	1021	1019
30	988	1004	1008	1014	1011	1011	1008	1004	988	972	949	929	921	902	886	873	869	863	863
35	812	831	836	846	847	849	848	843	821	801	773	745	736	716	693	679	680	672	675
40	612	633	635	650	658	663	664	660	630	611	584	553	550	535	510	502	508	505	512
45	476	481	480	487	495	505	513	511	485	470	451	431	425	411	401	388	392	400	402
50	375	379	382	377	388	401	406	404	384	369	352	335	329	319	312	297	304	311	310
55	291	296	299	290	306	312	315	317	294	284	271	253	248	243	235	222	232	231	232
60	219	226	226	219	234	235	238	240	219	211	202	185	182	179	171	162	169	166	168
65	156	164	163	161	172	170	172	173	157	149	141	127	123	120	115	108	112	109	110
70	99.5	106	107	107	113	113	114	114	103	95.5	88.7	78.8	75.6	72.9	69.7	66.9	68.3	66.3	66.6
75	58.2	62.6	64.0	65.7	68.8	69.1	69.6	69.5	62.3	57.0	51.6	45.4	43.5	41.5	39.8	38.2	38.3	37.3	37.4
80	31.1	33.3	34.5	36.4	38.1	38.7	38.9	38.7	34.5	31.3	27.7	24.4	23.4	21.8	21.1	20.2	19.9	19.4	19.5
85	13.4	14.3	15.0	16.7	17.9	19.4	20.1	19.8	17.3	14.9	12.3	10.5	10.5	9.74	9.49	8.98	8.74	8.58	8.63
90	3.20	3.32	3.12	2.92	4.16	6.14	7.34	7.23	5.02	3.34	2.94	3.35	4.51	4.90	5.14	5.13	5.18	5.24	5.19
95	2.03	2.33	2.26	1.52	1.37	1.36	1.47	1.54	1.39	1.40	1.59	1.75	2.45	2.38	2.32	2.37	2.72	3.04	3.21
100	1.85	1.77	1.77	1.83	1.81	1.84	1.82	1.73	1.76	1.81	1.87	1.91	2.83	2.81	2.79	2.81	2.80	2.84	2.85
105	2.18	2.16	2.20	2.32	2.64	2.95	2.99	2.89	2.67	2.43	2.45	2.36	3.36	3.39	3.39	3.41	3.41	3.44	3.42
110	2.70	2.67	2.70	2.93	3.20	3.41	3.50	3.39	3.20	2.99	2.90	2.90	4.03	4.10	4.17	4.11	4.11	4.14	4.19
115	3.32	3.27	3.28	3.46	3.66	3.82	3.92	3.84	3.75	3.66	3.54	3.57	4.75	4.80	4.85	4.89	4.88	4.97	5.04
120	4.03	3.96	3.90	4.03	4.19	4.31	4.38	4.34	4.33	4.29	4.21	4.29	5.52	5.55	5.60	5.71	5.76	5.84	5.90
125	4.77	4.70	4.62	4.66	4.82	4.99	5.06	5.05	5.00	4.88	4.93	5.07	6.30	6.34	6.31	6.50	6.72	6.83	6.90
130	5.47	5.45	5.42	5.37	5.65	5.77	5.92	5.83	5.83	5.65	5.71	5.89	7.07	7.10	7.06	7.20	7.43	7.54	7.63
135	6.33	6.21	6.15	6.14	6.21	6.36	6.53	6.44	6.39	6.31	6.51	6.61	7.82	7.83	7.84	7.85	8.03	8.13	8.19
140	6.95	6.91	6.92	6.88	6.81	6.87	7.00	6.93	6.95	7.01	7.25	7.32	8.55	8.56	8.54	8.58	8.55	8.69	8.73
145	7.68	7.61	7.61	7.56	7.52	7.54	7.55	7.55	7.59	7.71	7.88	7.98	9.17	9.17	9.16	9.13	9.13	9.17	9.16
150	8.31	8.24	8.19	8.22	8.20	8.20	8.20	8.20	8.30	8.44	8.46	8.59	9.70	9.69	9.66	9.63	9.65	9.69	9.66
155	8.88	8.79	8.77	8.72	8.84	8.84	8.84	8.86	8.94	8.95	9.04	9.13	10.1	10.1	10.1	10.1	10.1	10.1	10.1
160	9.40	9.34	9.34	9.34	9.37	9.41	9.45	9.45	9.47	9.51	9.60	9.68	10.5	10.5	10.5	10.5	10.5	10.5	10.5
165	10.0	9.97	9.94	9.94	9.98	9.98	9.99	9.98	10.0	10.1	10.2	10.3	10.9	10.9	10.9	10.9	10.8	10.8	10.8
170	10.5	10.5	10.5	10.5	10.5	10.6	10.5	10.5	10.6	10.6	10.7	10.8	11.2	11.2	11.2	11.2	11.1	11.1	11.1
175	11.0	11.0	11.0	11.1	11.1	11.0	11.0	11.0	11.1	11.1	11.2	11.2	11.4	11.4	11.4	11.4	11.3	11.3	11.3
180	11.3	11.3	11.4	11.4	11.4	11.3	11.3	11.3	11.4	11.4	11.4	11.3	11.3	11.3	11.4	11.4	11.4	11.3	11.3

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:219.3V I:0.6812A P:146.6W PF:0.9816 Lamp Flux:22709.9x1 lm		
NAME: HB2210-150S-57K_200218	TYPE:LED	WEIGHT:
SPEC.:HB2210-150S-57K_200218	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: #10cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1239	1239	1239	1239	1239														
5	1242	1242	1242	1242	1241														
10	1237	1239	1241	1243	1243														
15	1206	1213	1220	1227	1232														
20	1137	1151	1165	1180	1191														
25	1023	1041	1063	1087	1107														
30	868	889	911	947	970														
35	683	701	729	767	792														
40	521	531	548	581	596														
45	402	421	429	449	467														
50	311	327	337	349	372														
55	236	245	257	270	287														
60	171	179	189	203	214														
65	114	120	129	142	151														
70	68.6	73.0	79.5	89.0	95.3														
75	38.3	41.0	45.1	51.1	55.5														
80	19.7	21.5	23.8	27.3	29.7														
85	8.76	9.60	10.5	12.0	13.3														
90	5.05	4.99	4.24	4.04	4.01														
95	2.96	2.62	2.29	2.25	2.32														
100	2.81	2.72	2.64	2.59	2.61														
105	3.41	3.32	3.24	3.12	3.04														
110	4.14	4.00	3.93	3.85	3.72														
115	4.99	4.81	4.67	4.51	4.37														
120	5.87	5.71	5.52	5.25	5.15														
125	6.80	6.63	6.26	5.98	5.92														
130	7.50	7.32	6.96	6.75	6.68														
135	8.09	7.92	7.66	7.46	7.46														
140	8.63	8.43	8.36	8.22	8.13														
145	9.12	9.01	8.89	8.82	8.80														
150	9.64	9.56	9.47	9.38	9.33														
155	10.1	10.0	9.89	9.80	9.78														
160	10.4	10.4	10.3	10.2	10.2														
165	10.8	10.7	10.7	10.7	10.6														
170	11.1	11.0	11.0	10.9	10.9														
175	11.2	11.3	11.2	11.2	11.2														
180	11.3	11.4	11.4	11.4	11.3														

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:LUC**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**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	12364	12367	12366	12375	12373	12379	12380	12386	12391	12388
3.0	12376	12371	12370	12374	12372	12375	12379	12380	12385	12387
6.0	12392	12386	12391	12381	12386	12389	12383	12394	12403	12402
9.0	12414	12415	12414	12407	12404	12407	12399	12406	12407	12413
12.0	12418	12421	12425	12413	12409	12400	12398	12395	12393	12389
15.0	12354	12367	12377	12372	12354	12343	12333	12328	12310	12292
18.0	12187	12218	12233	12230	12204	12185	12169	12164	12128	12087
21.0	11882	11939	11958	11956	11923	11905	11876	11868	11815	11745
24.0	11417	11512	11534	11541	11507	11487	11451	11438	11349	11245
27.0	10739	10872	10911	10933	10897	10885	10843	10815	10698	10560
30.0	9880	10039	10080	10135	10108	10112	10076	10040	9878	9717
33.0	8860	9058	9095	9179	9178	9189	9161	9111	8907	8722
36.0	7736	7930	7971	8078	8099	8143	8124	8079	7846	7643
39.0	6505	6748	6773	6906	6975	7020	7024	6978	6686	6486
42.0	5501	5649	5625	5721	5850	5891	5949	5933	5628	5478
45.0	4758	4807	4801	4867	4949	5054	5129	5106	4847	4699
48.0	4123	4157	4183	4267	4402	4457	4457	4423	4226	4065
51.0	3569	3613	3644	3587	3713	3821	3866	3845	3649	3511
54.0	3067	3119	3148	3066	3217	3290	3320	3328	3108	3003
57.0	2608	2674	2692	2601	2767	2795	2820	2844	2627	2540
60.0	2188	2261	2264	2195	2344	2353	2380	2400	2189	2111
63.0	1805	1884	1880	1835	1959	1951	1966	1984	1800	1732
66.0	1438	1516	1512	1495	1593	1584	1596	1606	1452	1376
69.0	1096	1165	1173	1174	1244	1244	1247	1251	1130	1052
72.0	812.0	869.6	880.6	888.9	937.0	936.7	942.2	941.5	851.7	785.7
75.0	581.8	626.2	639.8	656.7	688.5	691.2	696.3	694.8	622.8	569.5
78.0	402.9	433.8	448.5	467.1	487.7	494.5	497.7	493.3	439.8	399.3
81.0	267.9	290.7	299.1	318.4	334.6	341.2	343.5	341.0	304.7	275.6
84.0	162.3	175.7	184.1	200.1	212.4	226.5	230.3	227.7	201.9	177.3
87.0	79.91	88.07	93.25	106.0	121.1	139.3	147.5	144.3	116.4	90.65
90.0	32.00	33.19	31.15	29.16	41.60	61.42	73.43	72.32	50.16	33.38
93.0	20.63	24.45	24.09	16.90	17.58	22.45	25.30	24.88	16.92	13.93
96.0	19.61	21.20	19.59	14.83	13.91	13.56	13.86	14.00	13.95	14.50
99.0	18.21	17.29	16.90	16.98	16.53	16.70	16.64	16.04	16.18	16.92
102.0	19.29	18.87	19.28	20.63	21.66	22.92	22.79	21.69	21.02	21.22
105.0	21.81	21.59	21.96	23.22	26.38	29.50	29.88	28.88	26.66	24.34
108.0	24.91	24.46	24.74	26.88	29.86	32.35	33.52	31.99	29.64	27.38
111.0	28.10	27.82	28.11	30.38	32.95	34.90	35.91	34.97	33.09	31.33
114.0	31.82	31.43	31.71	33.54	35.72	37.43	38.41	37.62	36.49	35.45
117.0	36.00	35.28	35.29	36.83	38.51	39.86	40.75	40.17	39.55	39.02
120.0	40.30	39.56	39.02	40.32	41.85	43.10	43.79	43.44	43.28	42.87
123.0	44.69	44.10	43.18	43.84	45.47	47.06	47.72	47.52	47.12	46.24
126.0	49.16	48.50	47.62	48.05	49.87	51.44	52.08	52.11	51.62	50.50
129.0	53.38	53.01	52.58	52.43	55.27	56.17	57.66	56.87	56.76	54.88
132.0	57.71	57.63	56.49	56.84	58.74	60.25	61.86	60.91	60.69	58.92
135.0	63.27	62.13	61.53	61.38	62.10	63.55	65.26	64.36	63.93	63.15
138.0	67.93	66.86	66.55	65.91	65.45	67.21	68.71	67.80	66.77	67.46
141.0	70.73	70.41	70.47	70.06	69.39	70.06	70.28	70.29	70.83	71.72
144.0	74.80	74.79	74.81	74.34	73.67	74.13	74.14	74.21	74.62	75.63
147.0	79.53	78.66	78.63	78.33	77.84	77.99	77.80	77.84	78.93	80.02
150.0	83.12	82.35	81.93	82.16	81.99	82.01	81.99	82.03	83.00	84.44
153.0	86.66	85.77	85.22	85.22	85.94	85.80	85.72	85.98	86.71	87.25
156.0	89.79	88.92	88.81	88.38	89.34	89.70	89.76	89.79	90.81	90.68
159.0	92.97	92.30	92.17	92.04	92.53	92.90	93.43	93.31	93.78	93.85
162.0	96.35	95.87	95.74	95.87	96.10	96.10	96.49	96.59	96.71	97.55
165.0	100.0	99.67	99.42	99.44	99.79	99.76	99.87	99.80	100.3	101.1
168.0	103.4	103.1	102.8	103.3	103.3	103.4	103.2	103.7	103.7	104.3
171.0	106.3	105.9	105.9	106.1	106.6	106.4	105.9	106.1	106.7	107.4
174.0	109.0	108.6	109.0	109.6	109.7	109.2	108.9	109.1	109.7	110.4
177.0	111.4	111.2	111.7	112.3	112.3	111.6	111.6	111.8	112.2	112.8
180.0	113.4	113.5	113.8	114.3	113.7	113.3	113.3	113.2	113.5	113.9
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	12389	12389	12364	12367	12366	12375	12373	12379	12380	12386
3.0	12394	12396	12380	12384	12386	12388	12391	12401	12400	12407
6.0	12414	12416	12400	12402	12403	12405	12411	12416	12418	12419
9.0	12416	12419	12405	12407	12401	12398	12398	12395	12396	12393
12.0	12390	12378	12357	12350	12339	12324	12310	12296	12287	12293
15.0	12269	12242	12222	12188	12165	12125	12106	12075	12064	12062
18.0	12037	11986	11944	11888	11850	11793	11755	11717	11696	11700
21.0	11657	11586	11532	11439	11380	11301	11250	11198	11173	11186
24.0	11102	10991	10933	10795	10703	10603	10549	10482	10468	10498
27.0	10378	10218	10146	9987	9859	9737	9700	9618	9613	9661
30.0	9488	9289	9212	9019	8856	8726	8694	8625	8628	8684

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

**Photometric Data Table [cd]**

33.0	8465	8216	8124	7920	7742	7590	7572	7504	7535	7589
36.0	7353	7055	6971	6772	6520	6386	6405	6331	6377	6449
39.0	6194	5857	5812	5652	5389	5305	5364	5311	5394	5489
42.0	5243	4980	4942	4800	4617	4518	4571	4596	4642	4689
45.0	4506	4311	4251	4112	4005	3878	3918	4004	4021	4022
48.0	3884	3723	3661	3530	3466	3313	3365	3461	3446	3452
51.0	3344	3177	3117	3031	2952	2810	2886	2932	2926	2952
54.0	2859	2678	2632	2571	2494	2366	2448	2456	2466	2496
57.0	2418	2241	2198	2164	2079	1971	2055	2035	2050	2091
60.0	2016	1853	1821	1788	1711	1619	1692	1658	1676	1713
63.0	1640	1498	1459	1427	1366	1292	1337	1311	1322	1360
66.0	1293	1160	1120	1091	1044	990.4	1020	994.3	1001	1033
69.0	977.0	870.3	840.1	812.3	775.1	741.3	759.1	738.1	741.2	764.3
72.0	720.7	636.9	610.9	587.2	562.2	539.6	546.7	531.2	534.5	549.9
75.0	516.1	454.4	435.3	414.8	398.4	382.3	383.5	372.7	373.8	382.6
78.0	359.4	317.7	305.1	286.1	276.5	262.5	261.3	253.6	255.5	259.4
81.0	240.3	212.3	203.9	189.0	183.3	175.2	172.4	167.8	168.8	169.9
84.0	150.9	131.5	127.6	117.6	113.6	108.3	105.4	102.9	103.5	104.8
87.0	72.81	64.24	67.62	66.84	68.94	67.88	66.59	66.38	67.12	67.72
90.0	29.41	33.47	45.14	49.05	51.41	51.31	51.76	52.40	51.85	50.47
93.0	15.23	18.29	26.15	25.68	24.97	25.36	30.82	34.37	35.98	34.33
96.0	16.43	17.47	25.09	24.45	23.98	24.17	26.39	29.49	31.10	28.13
99.0	17.87	18.46	27.45	27.13	26.87	26.96	27.11	27.79	27.97	27.35
102.0	21.20	20.80	30.26	30.08	30.24	30.39	30.34	30.51	30.41	30.17
105.0	24.50	23.62	33.56	33.93	33.94	34.08	34.12	34.37	34.24	34.05
108.0	26.74	26.66	37.54	38.14	38.71	38.19	38.20	38.53	38.65	38.24
111.0	30.30	30.32	41.64	42.34	43.10	42.59	42.52	42.95	43.52	43.12
114.0	34.04	34.32	45.97	46.54	47.15	47.23	47.15	47.87	48.61	48.11
117.0	37.88	38.49	50.53	50.94	51.50	52.27	52.14	53.17	53.89	53.46
120.0	42.05	42.90	55.23	55.52	56.02	57.13	57.56	58.40	59.02	58.72
123.0	45.96	47.61	59.92	60.27	60.32	62.07	63.52	64.28	65.30	64.38
126.0	51.03	52.31	64.56	64.97	64.54	66.55	68.74	70.17	70.83	69.75
129.0	55.54	57.12	69.23	69.51	69.07	70.73	73.00	74.29	75.19	73.77
132.0	60.34	61.86	73.74	73.98	73.71	74.59	76.87	77.72	78.60	77.40
135.0	65.09	66.09	78.17	78.35	78.45	78.54	80.26	81.32	81.92	80.90
138.0	69.38	70.38	82.43	82.88	82.76	82.88	83.73	84.44	85.01	83.93
141.0	73.88	74.74	86.90	86.97	86.68	87.10	86.57	88.10	88.47	87.50
144.0	77.71	78.68	90.62	90.73	90.43	90.46	90.23	90.66	90.59	90.13
147.0	81.16	82.35	93.92	93.82	93.87	93.24	93.34	93.93	93.70	93.38
150.0	84.61	85.86	97.00	96.88	96.64	96.30	96.51	96.94	96.56	96.42
153.0	88.25	89.15	99.79	99.46	98.98	99.22	99.38	99.44	99.28	99.00
156.0	91.41	92.44	102.2	101.9	101.5	101.5	101.8	101.7	101.8	101.3
159.0	94.85	95.67	104.0	104.0	103.9	104.0	104.1	104.1	104.0	103.7
162.0	98.43	99.01	106.5	106.6	106.6	106.4	106.3	106.4	106.3	106.0
165.0	101.9	102.6	108.9	109.1	109.0	108.6	108.3	108.3	108.2	108.0
168.0	105.4	106.0	110.7	111.0	111.0	110.5	109.9	110.0	109.7	109.8
171.0	108.3	108.7	112.2	112.4	112.3	112.1	111.3	111.2	110.9	111.0
174.0	111.1	111.0	113.3	113.5	113.8	113.5	112.8	112.6	112.1	112.2
177.0	113.1	112.7	114.0	114.2	114.5	114.6	113.8	113.6	113.3	113.1
180.0	113.6	113.4	113.4	113.5	113.8	114.3	113.6	113.3	113.2	113.2
G/C	300.0	315.0	330.0	345.0						
0.0	12391	12388	12389	12389						
3.0	12404	12401	12400	12397						
6.0	12420	12422	12424	12421						
9.0	12409	12422	12432	12436						
12.0	12324	12357	12389	12416						
15.0	12128	12201	12274	12324						
18.0	11801	11917	12029	12124						
21.0	11329	11481	11651	11783						
24.0	10672	10866	11096	11279						
27.0	9862	10078	10373	10580						
30.0	8894	9114	9475	9701						
33.0	7806	8049	8414	8657						
36.0	6631	6888	7280	7530						
39.0	5582	5780	6129	6308						
42.0	4832	4941	5234	5386						
45.0	4214	4294	4488	4674						
48.0	3636	3727	3863	4087						
51.0	3094	3198	3325	3539						
54.0	2603	2722	2848	3024						
57.0	2176	2285	2420	2567						
60.0	1791	1895	2030	2143						
63.0	1432	1529	1663	1761						
66.0	1093	1181	1300	1389						

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**

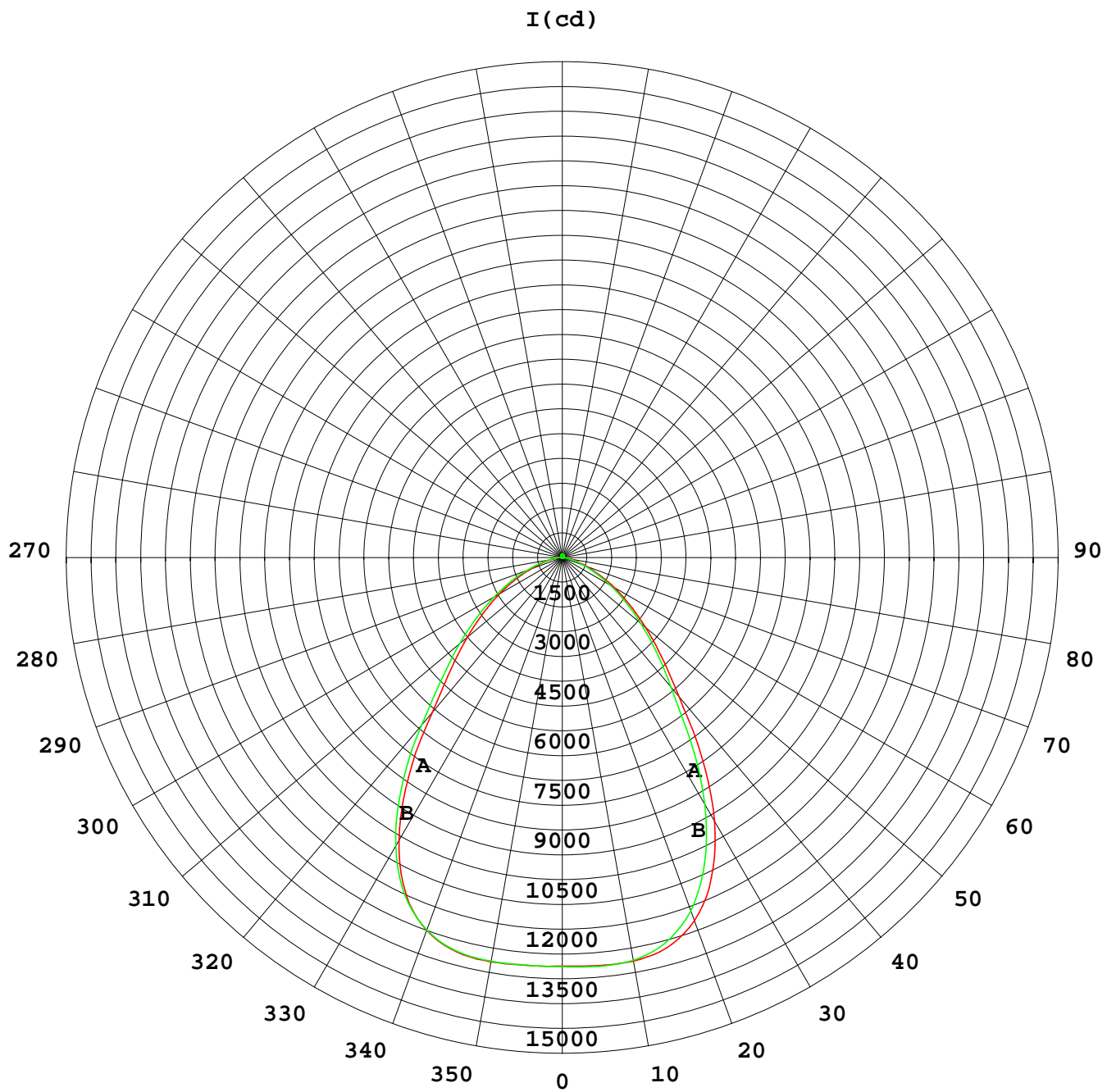


**Photometric Data Table [cd]**

69.0	811.6	882.9	978.8	1053
72.0	586.2	639.9	720.5	777.7
75.0	410.4	451.3	511.2	555.2
78.0	284.1	312.2	355.4	386.4
81.0	186.4	206.5	234.6	256.6
84.0	115.1	128.6	145.1	158.8
87.0	68.76	69.49	76.89	83.25
90.0	49.87	42.42	40.41	40.11
93.0	29.47	23.29	21.26	22.41
96.0	25.12	23.15	22.94	23.83
99.0	26.29	25.38	25.16	25.47
102.0	29.38	28.62	27.68	27.07
105.0	33.15	32.44	31.19	30.41
108.0	37.12	36.68	35.88	34.44
111.0	41.39	40.53	39.87	38.36
114.0	46.48	45.15	43.71	42.23
117.0	51.52	50.09	47.92	46.85
120.0	57.14	55.21	52.53	51.52
123.0	62.70	59.98	56.82	56.17
126.0	67.71	63.82	61.28	60.63
129.0	71.84	68.19	66.32	64.94
132.0	75.81	72.10	70.49	69.96
135.0	79.16	76.59	74.58	74.57
138.0	82.55	80.87	79.44	78.87
141.0	85.41	84.78	83.40	82.68
144.0	89.12	88.32	87.45	86.66
147.0	92.29	91.49	90.92	89.95
150.0	95.56	94.68	93.79	93.26
153.0	98.51	97.37	96.23	96.07
156.0	100.9	99.84	98.90	98.73
159.0	103.3	102.4	101.4	101.2
162.0	105.4	104.8	104.0	103.6
165.0	107.5	107.0	106.5	106.2
168.0	109.3	108.8	108.5	108.4
171.0	110.9	110.4	110.0	109.9
174.0	112.3	112.0	111.5	111.3
177.0	113.3	113.3	112.8	112.7
180.0	113.5	113.9	113.6	113.4

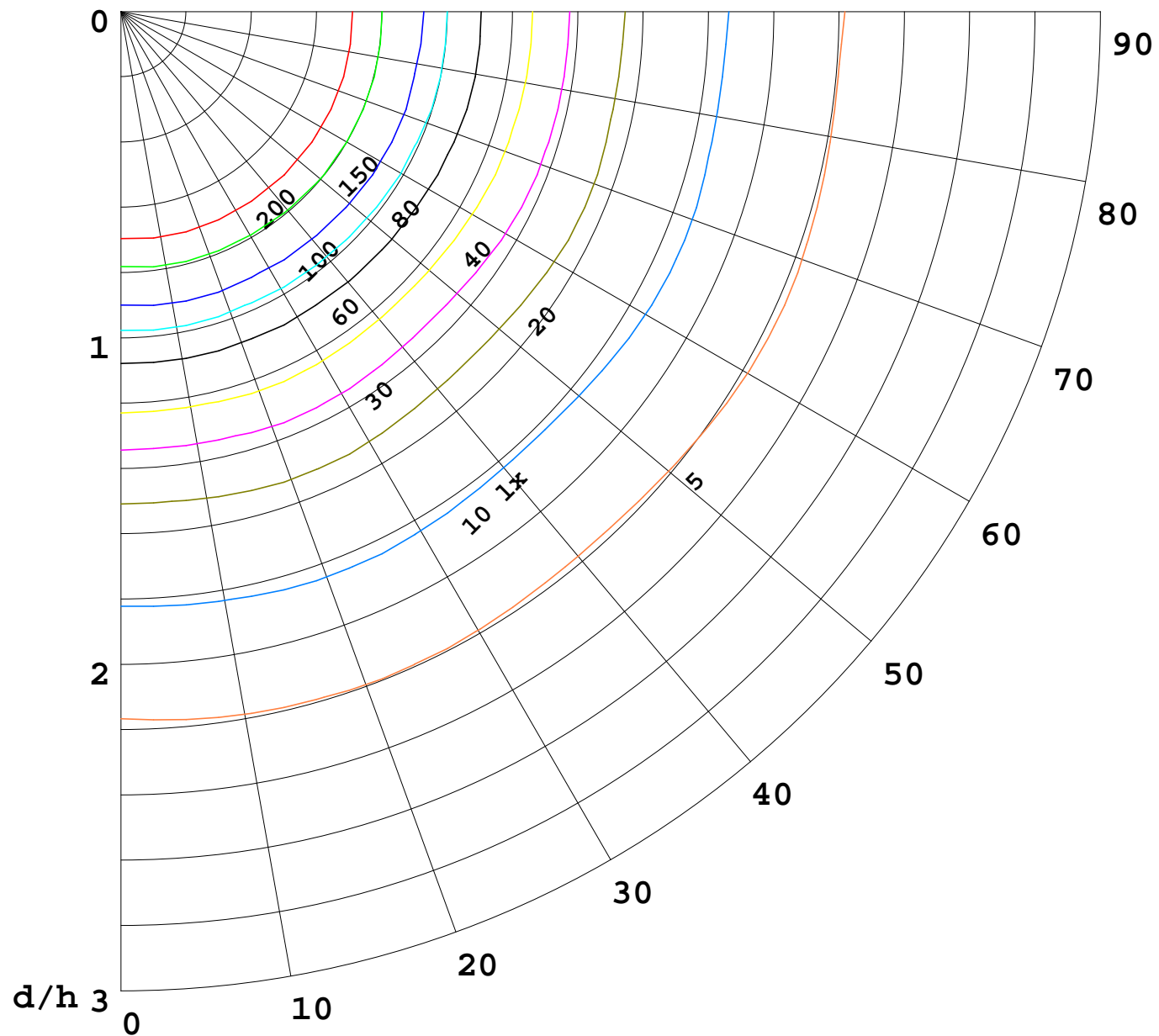
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: LUC**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: HB2210-150S-57K\_200218**



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

