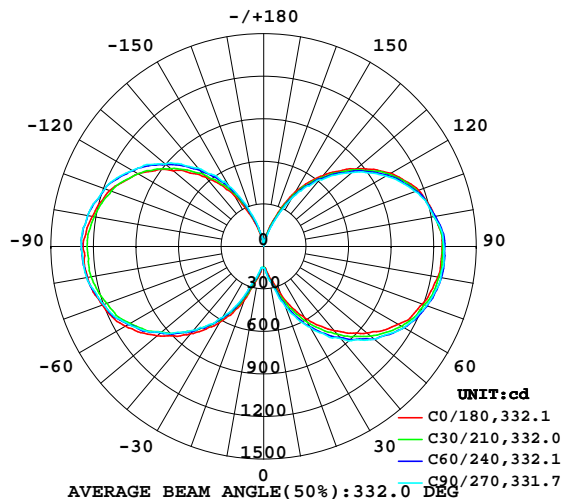


LUMINAIRE PHOTOMETRIC TEST REPORT

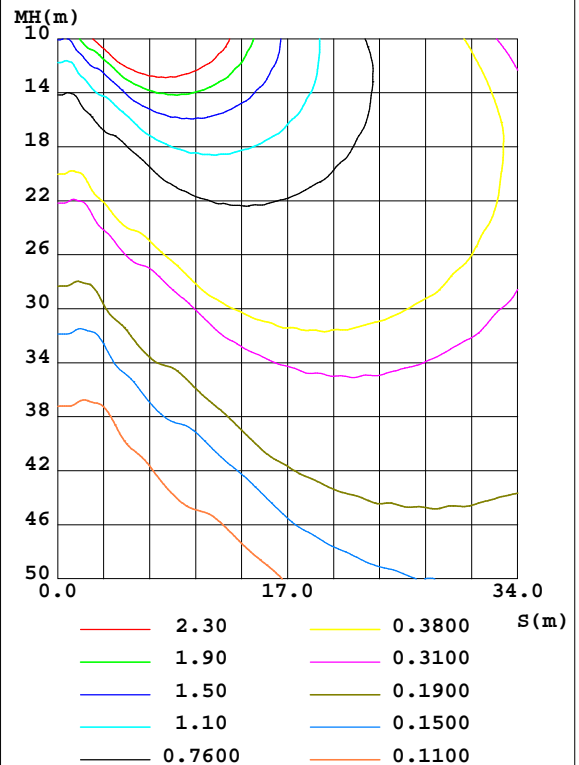
Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 152.14 lm/W			
MODEL	OBBc	Imax(cd)	1316	S/MH(C0/180)	4.28
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	4.28
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11881	η UP,DN(C0-180)	23.2,26.6
NOMINAL FLUX(lm)	11880.8	CIE CLASS	DIFFUSE	η UP,DN(C180-360)	24.4,25.9
LAMPS INSIDE	1	η up(%)	47.6	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	220	η down(%)	52.4	CIBSE SHR MAX	0.00

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:KAR
Test Date:14 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: OBBc-80W L+ -3000K

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	209.0	231.5	245.1	238.6	221.8	200.0	187.5	182.2	0- 10	17.16	17.16	0.14,0.14
20	364.4	407.0	452.7	437.5	404.2	369.5	335.9	335.0	10- 20	83.96	101.1	0.85,0.85
30	584.6	621.4	661.2	646.2	613.2	590.7	576.8	563.7	20- 30	235.3	336.4	2.83,2.83
40	774.7	805.3	849.9	832.4	802.7	785.3	772.0	761.7	30- 40	445.6	782.0	6.58,6.58
50	950.9	972.9	1018	1002	980.0	965.0	944.7	934.3	40- 50	687.1	1469	12.4,12.4
60	1098	1109	1143	1133	1126	1105	1098	1088	50- 60	936.1	2405	20.2,20.2
70	1189	1188	1221	1209	1211	1199	1201	1195	60- 70	1151	3556	29.9,29.9
80	1247	1236	1268	1255	1262	1261	1268	1252	70- 80	1298	4854	40.9,40.9
90	1257	1240	1270	1256	1274	1275	1286	1266	80- 90	1372	6227	52.4,52.4
100	1225	1194	1220	1208	1227	1245	1260	1241	90-100	1362	7589	63.9,63.9
110	1162	1122	1138	1124	1156	1176	1192	1178	100-110	1259	8848	74.5,74.5
120	1034	999.7	995.0	984.7	1026	1050	1073	1062	110-120	1083	9931	83.6,83.6
130	849.8	817.0	812.1	800.0	831.0	884.7	904.9	895.7	120-130	843.9	10775	90.7,90.7
140	652.1	619.6	617.9	588.9	641.4	685.3	722.4	703.7	130-140	583.3	11358	95.6,95.6
150	441.8	413.5	383.0	368.0	412.5	469.5	491.8	490.5	140-150	344.3	11703	98.5,98.5
160	194.3	165.5	135.6	131.6	174.4	211.0	233.8	222.1	150-160	143.9	11847	99.7,99.7
170	51.96	44.39	36.72	35.78	47.39	58.68	63.54	62.04	160-170	30.93	11878	100,100
180	16.17	16.10	16.12	16.28	16.16	16.10	16.13	16.30	170-180	3.224	11881	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1094.2 lm

%lum = 9.2%

%lamp = 9.2%

Conical surface Flux(120deg): 2405.2 lm

%lum = 20.2%

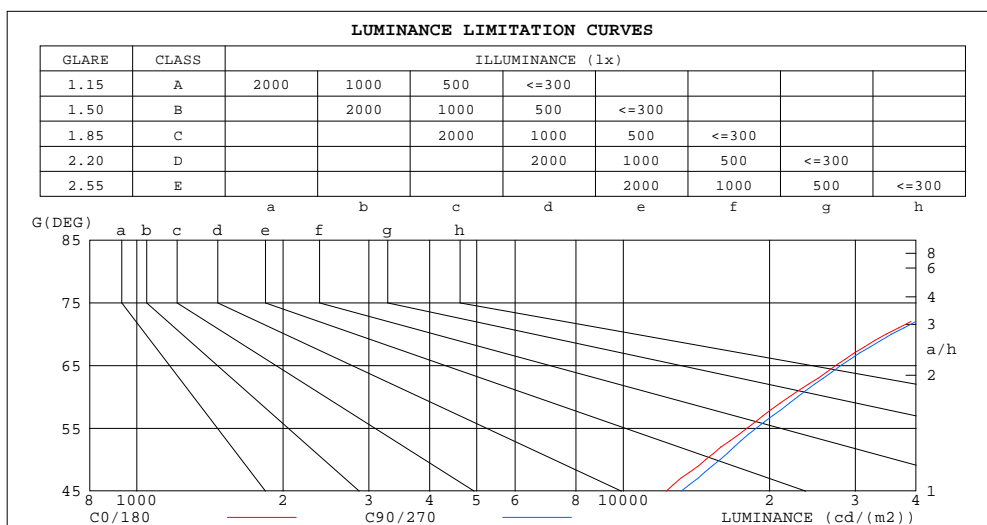
%lamp = 20.2%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBC-80W L+ -3000K

LUMINANCE LIMITATION CURVES

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	143988	146309
80	71793	73044
75	47184	48252
70	34753	35695
65	27363	28034
60	21970	22869
55	17982	18784
50	14794	15838
45	12262	13157

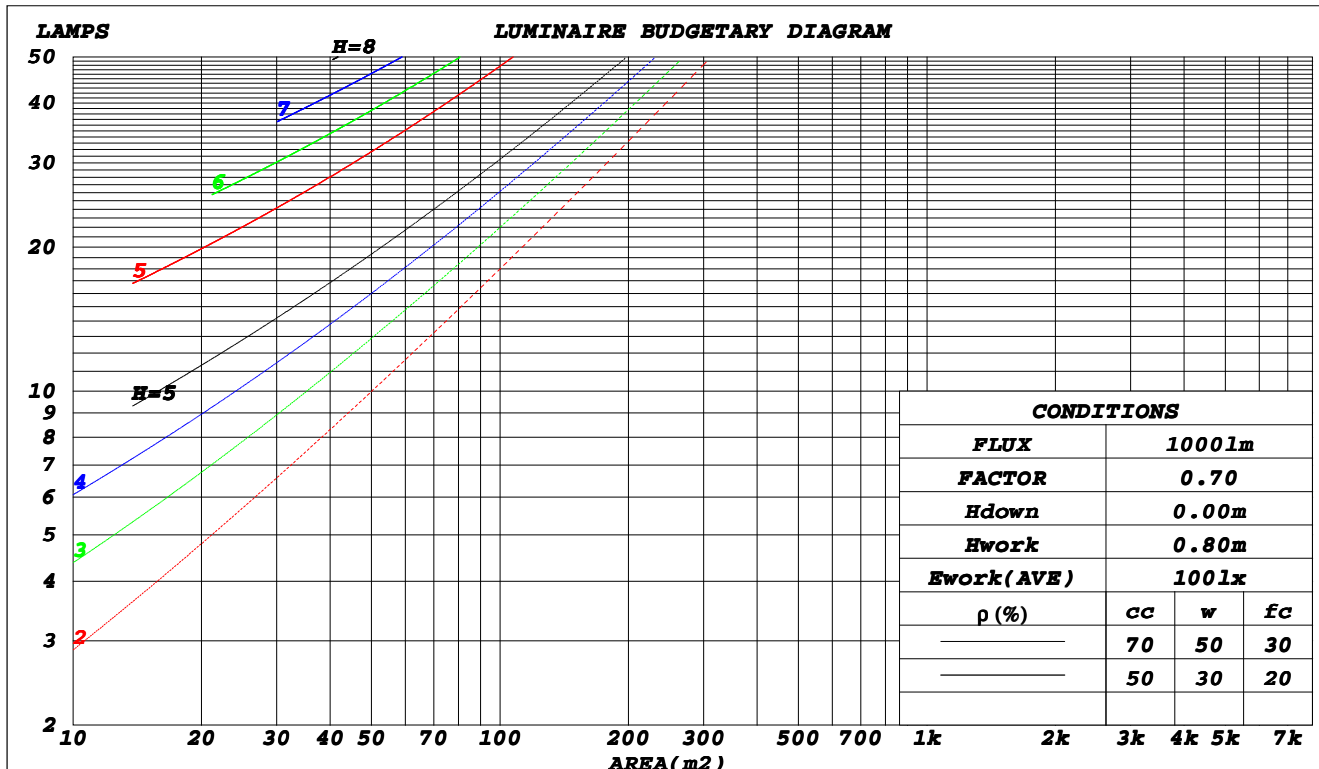
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 Feb 2020

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: OBBc-80W L+ -3000K

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	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	Coefficients of Utilization(CU)															
0.0	1.08	1.08	1.08	.00	.00	.00	.85	.85	.85	.71	.71	.71	.58	.58	.58	.52
1.0	.85	.79	.74	.78	.73	.68	.65	.61	.57	.53	.50	.47	.42	.40	.37	.32
2.0	.71	.63	.56	.65	.58	.51	.54	.48	.43	.43	.39	.35	.34	.30	.27	.22
3.0	.61	.51	.43	.55	.47	.40	.46	.39	.33	.36	.31	.27	.28	.24	.20	.16
4.0	.53	.43	.35	.48	.39	.32	.39	.32	.27	.31	.26	.21	.24	.20	.16	.12
5.0	.46	.36	.29	.42	.33	.27	.34	.27	.22	.27	.22	.17	.21	.16	.13	.09
6.0	.41	.31	.24	.37	.29	.22	.31	.24	.18	.24	.19	.14	.19	.14	.11	.08
7.0	.36	.27	.21	.33	.25	.19	.27	.21	.16	.22	.16	.12	.17	.12	.09	.06
8.0	.33	.24	.18	.30	.22	.16	.25	.18	.13	.20	.14	.10	.15	.11	.08	.05
9.0	.30	.21	.15	.27	.19	.14	.22	.16	.12	.18	.13	.09	.14	.10	.07	.04
10.0	.27	.19	.13	.25	.17	.12	.20	.14	.10	.16	.11	.08	.13	.09	.06	.04



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBc-80W L+ -3000K

WEC AND CCEC

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	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	.444	.252	.080	.422	.241	.076	.381	.219	.070	.344	.198	.064	.309	.179	.058		
2.0	.365	.200	.061	.345	.190	.059	.308	.171	.053	.273	.153	.048	.241	.136	.043		
3.0	.315	.168	.050	.297	.159	.048	.263	.142	.043	.231	.127	.039	.202	.112	.035		
4.0	.279	.145	.043	.262	.137	.041	.231	.122	.037	.202	.108	.033	.174	.095	.029		
5.0	.250	.127	.037	.235	.121	.035	.206	.107	.032	.179	.095	.028	.154	.082	.025		
6.0	.227	.114	.033	.213	.107	.031	.186	.095	.028	.161	.084	.025	.138	.073	.022		
7.0	.208	.103	.029	.195	.097	.028	.170	.086	.025	.147	.075	.022	.125	.065	.019		
8.0	.191	.094	.026	.179	.088	.025	.157	.078	.022	.135	.068	.020	.115	.059	.017		
9.0	.177	.086	.024	.166	.081	.023	.145	.072	.020	.125	.063	.018	.106	.054	.016		
10.0	.165	.079	.022	.155	.075	.021	.135	.066	.019	.116	.058	.016	.099	.050	.014		

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	.553	.553	.553	.473	.473	.473	.323	.323	.323	.185	.185	.185	.059	.059	.059		
1.0	.555	.521	.489	.475	.447	.421	.325	.307	.291	.187	.178	.169	.060	.057	.055		
2.0	.550	.500	.457	.471	.430	.395	.323	.298	.276	.186	.173	.162	.060	.056	.053		
3.0	.543	.485	.438	.466	.418	.380	.320	.290	.266	.185	.170	.157	.059	.055	.051		
4.0	.536	.473	.426	.460	.409	.370	.316	.285	.260	.183	.167	.154	.059	.054	.051		
5.0	.528	.464	.417	.454	.402	.363	.312	.281	.256	.181	.165	.152	.058	.054	.050		
6.0	.521	.457	.411	.448	.396	.358	.309	.277	.253	.179	.163	.151	.058	.053	.050		
7.0	.514	.451	.407	.442	.391	.355	.305	.274	.251	.177	.161	.150	.057	.053	.049		
8.0	.507	.446	.404	.436	.387	.352	.302	.271	.250	.176	.160	.149	.057	.053	.049		
9.0	.501	.441	.401	.431	.383	.350	.299	.269	.248	.174	.159	.148	.056	.052	.049		
10.0	.495	.437	.399	.427	.380	.348	.296	.267	.247	.173	.158	.148	.056	.052	.049		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBc-80W L+ -3000K

UGR(Unified Glare Rating) Table

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm												
NAME: OBBc					TYPE:LED			WEIGHT:				
SPEC.:80W L+ 3000K					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	20.2	21.3	21.0	22.2	23.3	20.5	21.7	21.4	22.6	23.7		
	3H	23.7	24.8	24.6	25.7	26.8	24.1	25.2	25.0	26.1	27.2	
	4H	25.7	26.7	26.6	27.6	28.8	26.1	27.1	27.0	28.0	29.2	
	6H	27.9	28.9	28.8	29.8	31.0	28.3	29.2	29.2	30.1	31.3	
	8H	29.1	30.0	30.0	31.0	32.2	29.4	30.3	30.3	31.3	32.5	
	12H	30.5	31.4	31.4	32.3	33.5	30.8	31.7	31.7	32.6	33.8	
4H	2H	21.3	22.3	22.2	23.2	24.4	21.6	22.6	22.5	23.5	24.7	
	3H	25.0	25.8	25.9	26.8	28.0	25.3	26.1	26.2	27.1	28.3	
	4H	27.1	27.9	28.0	28.8	30.0	27.4	28.2	28.3	29.1	30.4	
	6H	29.3	30.1	30.3	31.0	32.3	29.7	30.4	30.6	31.4	32.6	
	8H	30.6	31.3	31.6	32.3	33.6	31.0	31.6	31.9	32.6	33.9	
	12H	32.1	32.7	33.1	33.7	35.0	32.4	33.0	33.4	34.0	35.3	
8H	4H	27.8	28.5	28.8	29.5	30.8	28.1	28.8	29.0	29.7	31.0	
	6H	30.4	31.0	31.4	32.0	33.3	30.7	31.2	31.6	32.2	33.5	
	8H	31.8	32.4	32.8	33.4	34.7	32.1	32.6	33.1	33.7	35.0	
	12H	33.5	34.0	34.5	35.0	36.3	33.8	34.3	34.8	35.3	36.6	
	12H	4H	28.1	28.7	29.0	29.7	31.0	28.3	28.9	29.2	29.9	31.2
		6H	30.7	31.3	31.7	32.3	33.6	31.0	31.5	32.0	32.5	33.8
8H		32.3	32.8	33.3	33.8	35.1	32.5	33.0	33.5	34.0	35.3	
Variations with the observer position at spacings:												
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1						
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3						
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4						

CIE Pub.117 Corrected 11881 lm Total Lamp Luminous Flux.(8log(F/F0) = 8.6)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBc-80W L+ -3000K

UTILIZATION FACTORS TABLE

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

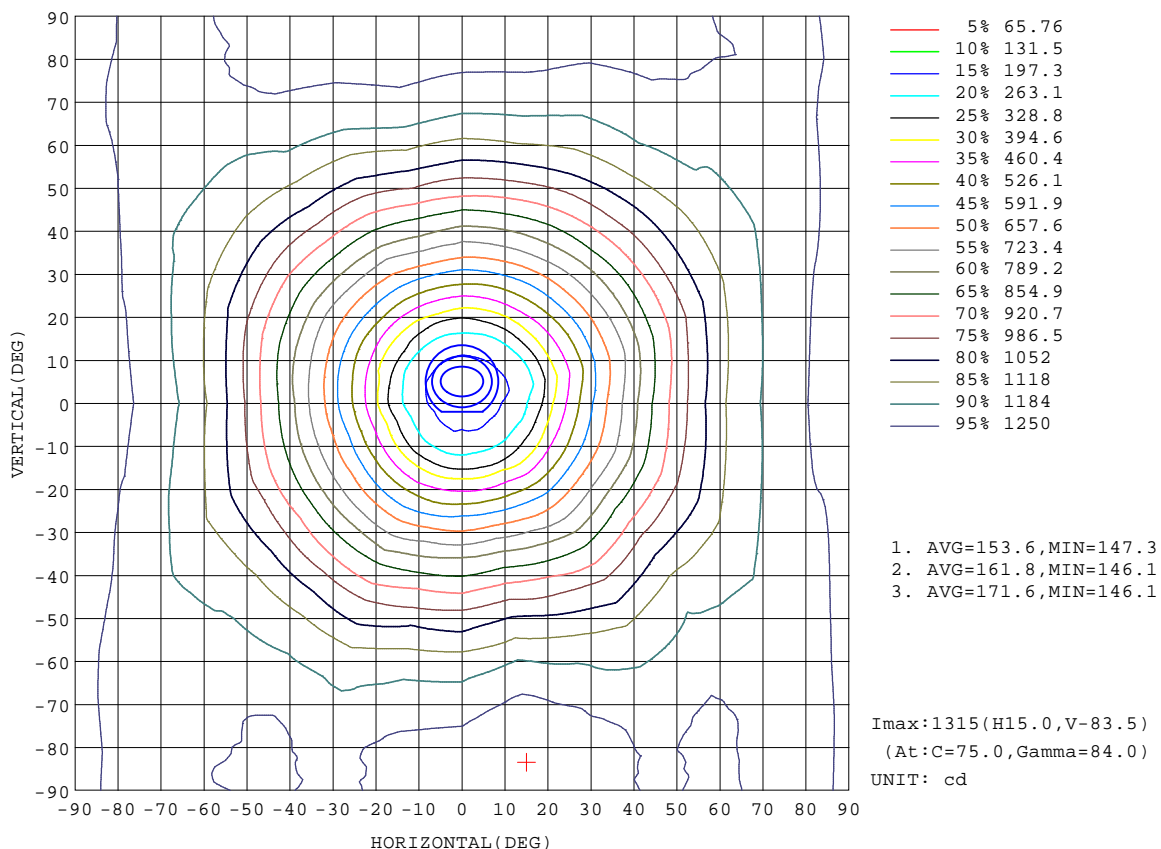
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	34	21	13	32	20	13	29	18	12	4
0.80	42	28	19	40	26	18	35	24	16	7
1.00	49	34	25	46	33	24	40	31	21	10
1.25	56	41	31	52	39	30	45	34	26	13
1.50	62	47	37	57	44	35	49	38	31	15
2.00	70	56	46	65	52	43	55	45	38	20
2.50	75	62	52	69	58	49	59	50	43	23
3.00	79	67	58	73	63	54	62	54	47	26
4.00	85	74	66	78	69	61	66	59	53	30
5.00	88	79	72	82	74	67	69	63	57	33
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:KAR
Test Date:14 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: OBBc-80W L+ -3000K

ISOCANDELA DIAGRAM

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

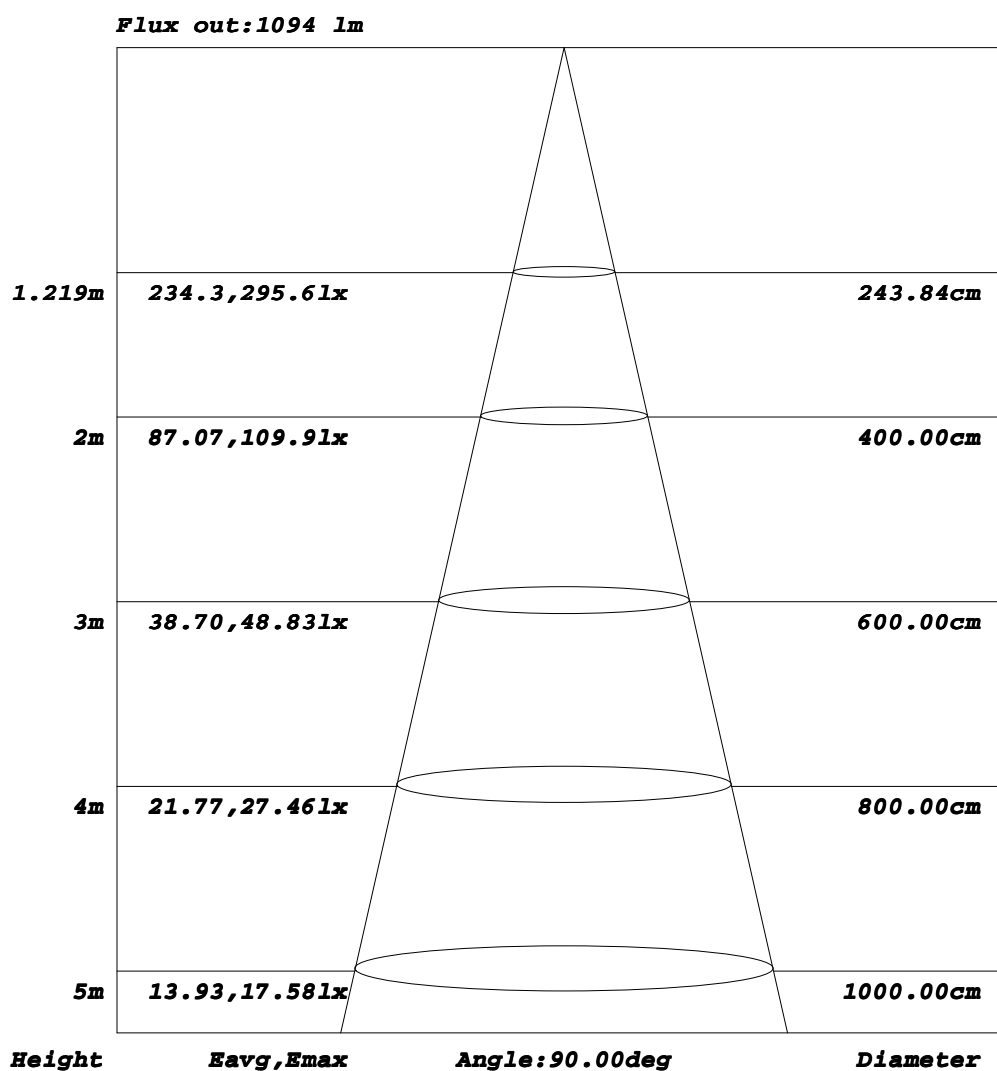


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 Feb 2020

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: OBBc-80W L+ -3000K

AAI Figure

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBC	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



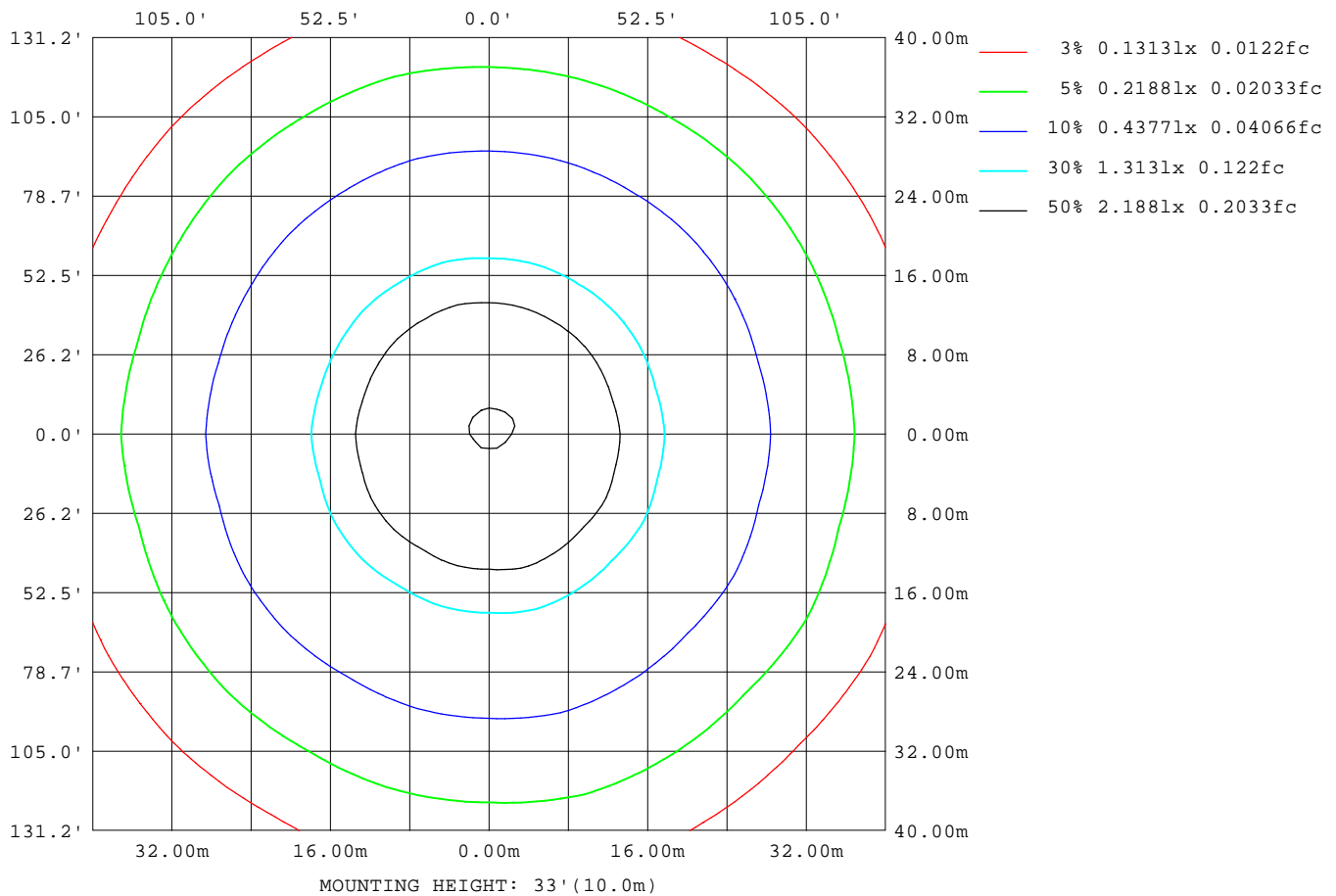
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 14 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: OBBC-80W L+ -3000K

ISOLUX DIAGRAM

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBc-80W L+ -3000K

LED Avg.L Report

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBC	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

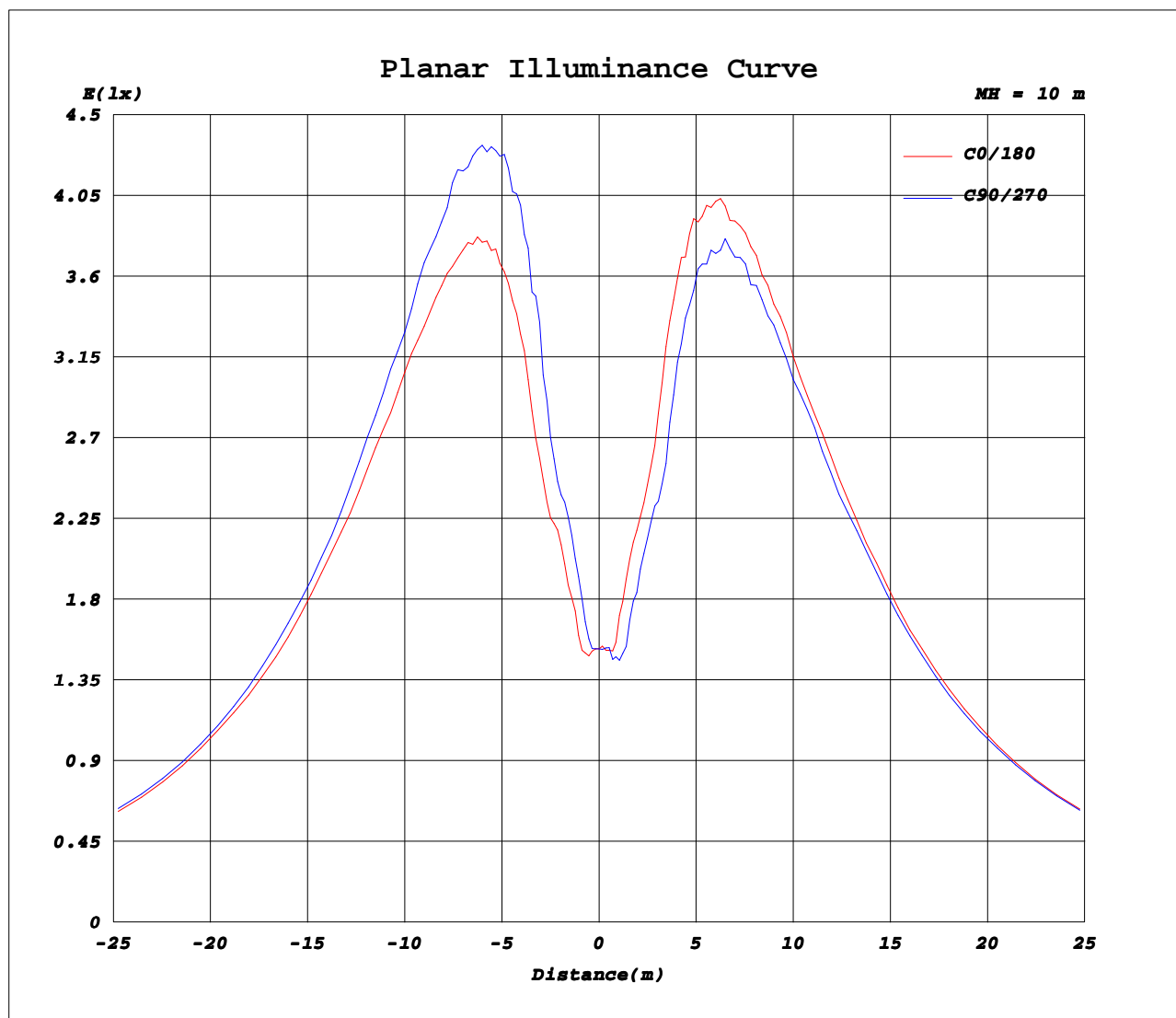
AvgL	cd/m2
L_0~180(65)av	27636
L_0~180(75)av	47646
L_0~180(85)av	144969
L_90~270(65)av	27783
L_90~270(75)av	47931
L_90~270(85)av	146485
L_45(65)av	27442
L_45(75)av	47425
L_45(85)av	144394

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBC-80W L+ -3000K

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 14 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: OBBC-80W L+ -3000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm																		
NAME: OBBc									TYPE:LED					WEIGHT:				
SPEC.:80W L+ 3000K									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	152	153	152	151	151	151	153	152	153	153	154	153	152	153	152	151	151	151	153
5	153	159	167	170	174	179	182	181	180	176	181	176	158	154	151	150	152	149	150
10	209	216	228	231	235	242	245	237	237	239	240	234	222	215	202	200	194	190	187
15	260	271	289	296	314	318	323	311	314	311	314	311	282	275	259	257	255	247	247
20	364	388	394	407	429	438	453	444	442	437	441	427	404	398	377	370	353	344	336
25	478	501	510	523	547	570	564	565	549	547	547	547	516	492	492	491	480	476	462
30	585	600	617	621	652	677	661	662	641	646	656	632	613	601	593	591	585	582	577
35	682	697	714	715	752	777	762	760	738	755	750	731	711	688	685	695	681	688	675
40	775	780	807	805	838	873	850	845	826	832	839	815	803	782	779	785	783	793	772
45	867	865	899	891	928	958	930	936	905	917	922	891	892	877	864	880	866	885	856
50	951	944	986	973	1021	1040	1018	1016	989	1002	1000	978	980	951	941	965	951	974	945
55	1031	1016	1057	1041	1082	1114	1077	1080	1048	1069	1066	1035	1061	1027	1026	1046	1041	1053	1033
60	1098	1079	1127	1109	1144	1178	1143	1146	1114	1133	1129	1094	1126	1084	1087	1105	1102	1121	1098
65	1156	1127	1175	1145	1194	1221	1185	1184	1150	1175	1168	1134	1180	1141	1148	1169	1172	1185	1164
70	1189	1161	1204	1188	1227	1262	1221	1213	1186	1209	1203	1164	1211	1171	1176	1199	1204	1226	1201
75	1221	1189	1239	1211	1252	1289	1249	1243	1215	1239	1227	1192	1245	1200	1212	1238	1237	1258	1232
80	1247	1212	1257	1236	1273	1308	1268	1261	1234	1255	1243	1209	1262	1222	1236	1261	1265	1288	1268
85	1255	1219	1262	1240	1279	1314	1275	1264	1234	1260	1242	1210	1272	1229	1241	1269	1280	1301	1278
90	1257	1226	1262	1240	1278	1312	1270	1261	1240	1256	1245	1212	1274	1236	1245	1275	1285	1309	1286
95	1253	1213	1253	1229	1264	1295	1261	1251	1220	1244	1226	1198	1255	1218	1238	1264	1281	1301	1282
100	1225	1190	1219	1194	1230	1264	1220	1211	1186	1208	1195	1162	1227	1194	1213	1245	1260	1278	1260
105	1197	1157	1193	1168	1191	1223	1190	1177	1153	1173	1161	1130	1195	1161	1184	1211	1228	1250	1229
110	1162	1121	1151	1122	1147	1176	1138	1128	1108	1124	1113	1083	1156	1119	1143	1176	1193	1198	1192
115	1098	1063	1093	1065	1080	1104	1072	1066	1038	1057	1048	1015	1088	1059	1093	1124	1136	1155	1143
120	1034	999	1022	1000	1006	1022	995	995	975	985	974	946	1026	994	1026	1050	1069	1080	1073
125	949	917	931	914	917	940	908	902	878	897	886	863	935	918	946	973	993	1004	1007
130	850	830	842	817	829	837	812	804	790	800	792	778	831	831	855	885	903	908	905
135	751	729	736	716	729	732	712	707	700	692	692	682	731	734	763	783	804	811	821
140	652	632	638	620	621	625	618	607	598	589	591	583	641	634	666	685	703	707	722
145	553	537	524	518	519	521	507	501	485	483	481	474	532	530	554	576	600	605	617
150	442	420	429	413	391	389	383	372	363	368	364	353	412	420	454	469	481	490	492
155	312	296	300	270	255	253	250	249	246	231	238	233	289	305	330	334	349	356	356
160	194	192	179	165	150	146	136	138	137	132	132	129	174	185	198	211	220	223	234
165	98.5	88.0	76.8	72.9	70.5	67.3	65.5	63.8	65.2	65.2	64.9	65.4	82.8	90.1	105	112	117	122	122
170	52.0	50.9	46.4	44.4	41.3	38.1	36.7	36.7	36.5	35.8	36.2	36.6	47.4	51.4	55.8	58.7	59.8	62.6	63.5
175	27.0	25.4	23.6	22.0	20.3	18.9	18.5	18.4	18.6	18.5	18.6	18.8	23.4	26.2	28.7	30.0	30.9	31.9	32.6
180	16.2	16.1	16.1	16.1	16.1	16.1	16.1	16.2	16.2	16.3	16.4	16.5	16.2	16.1	16.1	16.1	16.1	16.1	16.1

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBc-80W L+ -3000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.5V I:0.3655A P:78.09W PF:0.9733 Lamp Flux:11880.8x1 lm		
NAME: OBBc	TYPE:LED	WEIGHT:
SPEC.:80W L+ 3000K	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	152	153	153	154	153														
5	153	151	149	148	145														
10	189	183	182	178	179														
15	247	239	239	237	239														
20	341	334	335	326	329														
25	461	461	452	446	442														
30	567	572	564	549	550														
35	670	664	661	648	643														
40	761	757	762	742	738														
45	856	848	852	839	828														
50	946	936	934	924	912														
55	1031	1019	1018	1002	990														
60	1098	1082	1088	1081	1062														
65	1160	1145	1151	1139	1122														
70	1201	1185	1195	1184	1157														
75	1225	1214	1221	1212	1194														
80	1262	1247	1252	1238	1222														
85	1271	1258	1265	1249	1237														
90	1274	1259	1266	1247	1240														
95	1271	1258	1263	1251	1240														
100	1252	1237	1241	1231	1221														
105	1220	1211	1210	1199	1188														
110	1182	1173	1178	1164	1159														
115	1134	1119	1129	1122	1105														
120	1066	1059	1062	1050	1038														
125	984	983	989	975	973														
130	900	888	896	888	883														
135	796	805	801	787	793														
140	694	703	704	689	701														
145	589	597	596	587	600														
150	494	497	490	483	495														
155	361	359	351	347	350														
160	217	220	222	221	223														
165	125	123	123	131	130														
170	63.0	61.9	62.0	62.5	62.9														
175	32.2	32.1	32.9	33.7	33.1														
180	16.2	16.2	16.3	16.4	16.5														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:14 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: OBBc-80W L+ -3000K

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	152.5	153.0	152.2	151.4	151.4	151.2	152.5	151.7	153.4	153.1
3.0	149.1	151.5	152.0	153.9	155.7	157.2	158.6	155.8	156.1	153.3
6.0	162.6	169.4	181.6	184.8	187.4	187.7	195.9	192.0	191.0	191.9
9.0	195.0	203.9	215.7	218.8	226.1	230.4	234.4	228.2	226.7	228.1
12.0	233.5	237.3	249.0	255.0	258.4	264.0	262.5	261.2	262.9	260.2
15.0	259.8	270.7	288.8	295.8	314.0	317.8	322.6	310.8	313.7	310.9
18.0	313.5	347.6	358.7	369.7	395.7	400.3	405.7	400.2	398.5	395.0
21.0	391.5	414.4	420.3	438.8	464.0	473.8	470.9	472.8	459.1	462.1
24.0	454.3	478.9	480.5	500.0	527.2	544.4	534.1	528.4	534.1	531.1
27.0	519.1	543.5	548.5	561.8	592.3	614.7	603.5	597.1	581.4	588.3
30.0	584.6	599.6	616.6	621.4	652.3	676.5	661.2	661.8	641.4	646.2
33.0	640.6	653.7	679.5	679.8	715.4	738.7	724.1	722.6	705.3	704.1
36.0	699.2	705.1	736.5	741.6	771.2	802.8	792.1	780.5	766.2	764.2
39.0	755.6	771.2	789.9	787.7	826.7	850.3	831.6	826.9	803.1	824.8
42.0	809.4	812.2	850.1	837.4	879.7	899.7	896.0	882.2	868.7	879.4
45.0	867.1	865.4	899.0	891.0	928.2	958.3	930.4	936.4	904.9	916.6
48.0	917.0	913.3	950.0	937.8	973.3	1006	984.4	978.5	953.3	971.9
51.0	964.8	964.9	999.4	989.6	1031	1059	1030	1035	1001	1019
54.0	1017	1003	1041	1031	1067	1100	1062	1067	1034	1059
57.0	1057	1039	1086	1065	1107	1134	1106	1102	1073	1097
60.0	1098	1079	1127	1109	1144	1178	1143	1146	1114	1133
63.0	1143	1112	1155	1138	1173	1206	1171	1166	1132	1155
66.0	1163	1133	1183	1150	1199	1228	1191	1191	1159	1182
69.0	1181	1153	1199	1185	1218	1257	1215	1207	1179	1202
72.0	1208	1175	1224	1201	1239	1274	1235	1226	1197	1217
75.0	1221	1189	1239	1211	1252	1289	1249	1243	1215	1239
78.0	1234	1204	1248	1232	1267	1303	1265	1255	1228	1251
81.0	1253	1217	1258	1236	1276	1310	1268	1264	1238	1255
84.0	1255	1220	1264	1242	1279	1316	1276	1265	1237	1259
87.0	1258	1220	1263	1239	1280	1310	1273	1264	1234	1262
90.0	1257	1226	1262	1240	1278	1312	1270	1261	1240	1256
93.0	1261	1222	1262	1237	1274	1308	1266	1256	1228	1250
96.0	1246	1207	1248	1223	1259	1290	1254	1244	1215	1239
99.0	1233	1194	1227	1205	1237	1269	1227	1219	1196	1215
102.0	1216	1178	1213	1187	1214	1248	1207	1200	1173	1194
105.0	1197	1157	1193	1168	1191	1223	1190	1177	1153	1173
108.0	1178	1138	1168	1146	1174	1199	1162	1153	1125	1147
111.0	1153	1112	1141	1113	1132	1162	1125	1116	1096	1112
114.0	1114	1075	1105	1080	1091	1114	1086	1076	1053	1070
117.0	1076	1037	1065	1036	1054	1085	1045	1039	1011	1036
120.0	1034	999.0	1022	999.7	1006	1022	995.0	994.7	975.1	984.7
123.0	980.7	951.0	974.7	936.9	954.9	975.0	944.8	940.7	918.7	933.0
126.0	925.9	900.0	913.3	894.0	898.3	919.4	890.1	884.6	867.0	873.0
129.0	872.8	845.8	860.5	838.4	849.3	856.9	832.3	827.4	809.2	820.8
132.0	819.7	792.8	799.3	777.7	781.2	796.9	774.5	765.3	748.9	751.7
135.0	751.1	728.8	736.2	715.8	729.4	732.4	711.6	707.1	700.0	692.4
138.0	699.2	675.5	676.2	663.1	663.9	670.5	648.0	644.5	623.9	642.2
141.0	637.7	616.6	616.5	603.9	613.2	608.0	599.6	585.7	575.7	575.0
144.0	573.6	555.8	553.3	545.1	536.0	531.5	528.6	513.9	505.2	502.0
147.0	504.0	489.0	496.4	484.9	474.4	466.4	463.6	447.7	434.5	440.0
150.0	441.8	419.6	429.0	413.5	391.0	388.8	383.0	372.1	362.9	368.0
153.0	364.2	336.4	343.5	333.4	318.2	310.0	303.7	309.6	304.4	296.6
156.0	276.2	269.2	247.8	244.1	234.3	235.9	220.5	224.3	221.7	215.0
159.0	208.9	197.5	196.9	182.5	166.5	171.2	155.8	160.4	158.3	151.9
162.0	152.5	143.1	134.5	124.2	113.0	103.8	98.34	97.97	96.83	96.29
165.0	98.51	87.97	76.79	72.87	70.47	67.26	65.45	63.83	65.22	65.18
168.0	65.46	62.11	56.76	55.27	51.78	49.06	48.08	47.48	47.24	46.39
171.0	46.47	44.83	40.43	38.96	36.67	33.62	32.03	32.60	32.27	31.22
174.0	31.48	29.56	27.26	25.66	24.19	21.94	20.33	20.57	20.59	20.22
177.0	16.76	16.60	16.44	16.27	16.14	16.09	16.14	16.17	16.25	16.30
180.0	16.17	16.15	16.12	16.10	16.07	16.09	16.12	16.17	16.20	16.28
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	153.6	152.8	152.5	153.0	152.2	151.4	151.4	151.2	152.5	151.7
3.0	153.5	149.8	152.2	151.6	150.9	152.4	151.4	151.9	153.8	155.3
6.0	188.2	187.4	174.0	166.2	154.7	152.8	152.4	148.8	148.4	149.9
9.0	227.8	223.2	210.1	201.1	189.7	187.1	180.8	181.4	174.9	178.0
12.0	262.5	258.9	241.7	238.8	230.9	226.0	220.0	215.6	210.4	209.0
15.0	314.4	311.2	282.0	274.5	258.6	256.9	254.5	246.7	247.4	247.1
18.0	391.5	393.6	349.7	343.5	335.9	327.3	295.1	291.8	284.2	287.5
21.0	460.7	455.7	426.3	398.6	390.4	378.5	377.7	376.5	361.2	358.5
24.0	529.6	517.7	486.4	482.7	466.2	452.2	447.8	443.4	441.7	435.4
27.0	592.1	585.7	551.9	533.5	525.0	529.9	520.0	519.1	514.9	504.4
30.0	656.3	632.0	613.2	601.1	592.9	590.7	585.5	582.5	576.8	567.5

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 14 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: OBBC-80W L+ -3000K

Photometric Data Table [cd]

33.0	707.7	691.6	676.6	664.7	646.0	646.9	649.7	654.8	645.8	625.3
36.0	766.4	749.6	732.8	715.8	699.2	705.1	712.7	715.0	699.7	688.4
39.0	819.4	796.7	791.7	761.0	761.9	765.8	760.9	769.2	756.1	741.6
42.0	868.9	853.4	839.5	813.4	805.7	823.7	816.9	822.1	811.2	805.0
45.0	921.6	891.4	891.8	877.1	863.6	879.9	866.2	884.9	855.7	856.5
48.0	964.1	945.0	944.4	912.9	913.8	928.9	919.9	931.1	919.7	913.4
51.0	1014	984.7	993.8	964.2	955.9	977.5	962.4	988.2	957.2	957.4
54.0	1054	1024	1041	1010	1014	1026	1020	1032	1019	1016
57.0	1092	1057	1085	1050	1051	1074	1062	1086	1059	1059
60.0	1129	1094	1126	1084	1087	1105	1102	1121	1098	1098
63.0	1156	1118	1163	1121	1127	1146	1140	1160	1137	1138
66.0	1176	1142	1185	1143	1153	1179	1178	1196	1172	1168
69.0	1194	1160	1205	1165	1171	1194	1196	1221	1196	1197
72.0	1213	1179	1220	1181	1192	1212	1219	1236	1216	1209
75.0	1227	1192	1245	1200	1212	1238	1237	1258	1232	1225
78.0	1242	1208	1257	1219	1228	1256	1257	1283	1259	1256
81.0	1243	1210	1265	1227	1240	1262	1268	1293	1272	1263
84.0	1243	1213	1271	1230	1241	1270	1277	1299	1276	1269
87.0	1247	1218	1264	1231	1242	1267	1283	1300	1280	1273
90.0	1245	1212	1274	1236	1245	1275	1285	1309	1286	1274
93.0	1236	1204	1264	1231	1242	1270	1287	1306	1287	1279
96.0	1221	1189	1253	1214	1231	1258	1277	1297	1278	1267
99.0	1203	1168	1235	1200	1218	1249	1262	1283	1264	1256
102.0	1180	1150	1215	1184	1203	1234	1248	1268	1250	1237
105.0	1161	1130	1195	1161	1184	1211	1228	1250	1229	1220
108.0	1137	1102	1172	1136	1158	1188	1203	1221	1207	1196
111.0	1097	1070	1145	1109	1136	1170	1187	1194	1187	1175
114.0	1062	1028	1102	1076	1105	1139	1149	1171	1155	1145
117.0	1023	992.0	1063	1037	1062	1094	1110	1127	1117	1106
120.0	974.4	946.4	1026	994.2	1026	1050	1069	1080	1073	1066
123.0	922.0	900.6	969.3	950.0	982.1	1018	1025	1041	1029	1023
126.0	866.8	844.8	923.8	896.8	931.2	954.7	976.5	981.4	983.0	967.0
129.0	813.9	797.9	856.9	847.9	870.6	900.2	917.3	929.8	926.5	915.4
132.0	754.8	729.8	805.6	796.4	820.1	849.0	866.3	874.7	882.4	861.1
135.0	692.0	682.0	731.1	733.9	763.0	782.9	804.0	811.3	821.2	796.0
138.0	633.5	614.8	684.0	676.5	698.3	723.0	738.8	752.2	750.9	731.5
141.0	574.4	560.4	615.7	610.4	640.7	655.0	674.9	679.5	702.1	679.7
144.0	502.6	496.3	556.0	551.4	584.2	598.2	612.2	619.6	630.5	605.0
147.0	438.5	435.1	480.8	490.8	522.7	532.8	547.7	557.5	563.3	544.8
150.0	364.0	353.0	412.5	419.9	453.9	469.5	481.2	489.9	491.8	494.4
153.0	287.9	286.6	336.0	350.3	378.9	394.7	402.2	420.6	413.9	411.7
156.0	212.5	211.3	261.2	284.8	300.6	307.9	318.9	323.3	337.2	306.9
159.0	152.5	151.4	192.5	210.2	222.9	221.5	236.3	245.2	245.4	246.8
162.0	92.56	94.51	133.8	150.5	165.1	160.1	176.6	186.4	188.8	193.9
165.0	64.87	65.41	82.81	90.15	105.4	112.3	117.4	122.1	122.3	124.7
168.0	46.61	47.48	59.42	61.97	68.30	71.42	74.48	76.64	77.88	78.08
171.0	31.64	32.12	42.07	45.72	50.15	51.65	53.77	55.96	57.20	56.53
174.0	20.06	20.68	28.02	30.56	33.32	35.15	36.36	37.64	38.09	38.02
177.0	16.39	16.47	16.37	16.47	16.50	16.59	16.72	16.86	17.09	16.91
180.0	16.36	16.51	16.16	16.15	16.13	16.10	16.10	16.10	16.13	16.18
G/C	300.0	315.0	330.0	345.0						
0.0	153.4	153.1	153.6	152.8						
3.0	152.3	151.8	153.7	151.4						
6.0	150.5	148.1	148.7	148.5						
9.0	175.4	175.1	168.8	169.2						
12.0	207.7	206.5	203.1	206.5						
15.0	239.3	239.3	236.9	239.1						
18.0	290.9	286.4	277.6	280.5						
21.0	355.5	355.9	350.7	346.4						
24.0	430.0	427.3	412.8	411.7						
27.0	500.9	506.5	490.5	480.9						
30.0	571.7	563.7	549.3	549.6						
33.0	633.3	627.8	615.6	602.1						
36.0	684.8	686.7	671.8	664.9						
39.0	739.3	742.5	726.4	714.4						
42.0	800.7	789.6	782.7	769.0						
45.0	848.4	851.7	838.6	827.8						
48.0	902.4	903.7	890.0	884.8						
51.0	949.5	955.1	938.3	931.3						
54.0	1002	999.9	991.2	977.7						
57.0	1049	1046	1035	1026						
60.0	1082	1088	1081	1062						
63.0	1125	1133	1114	1096						
66.0	1153	1163	1150	1133						

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 14 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: OBBC-80W L+ -3000K

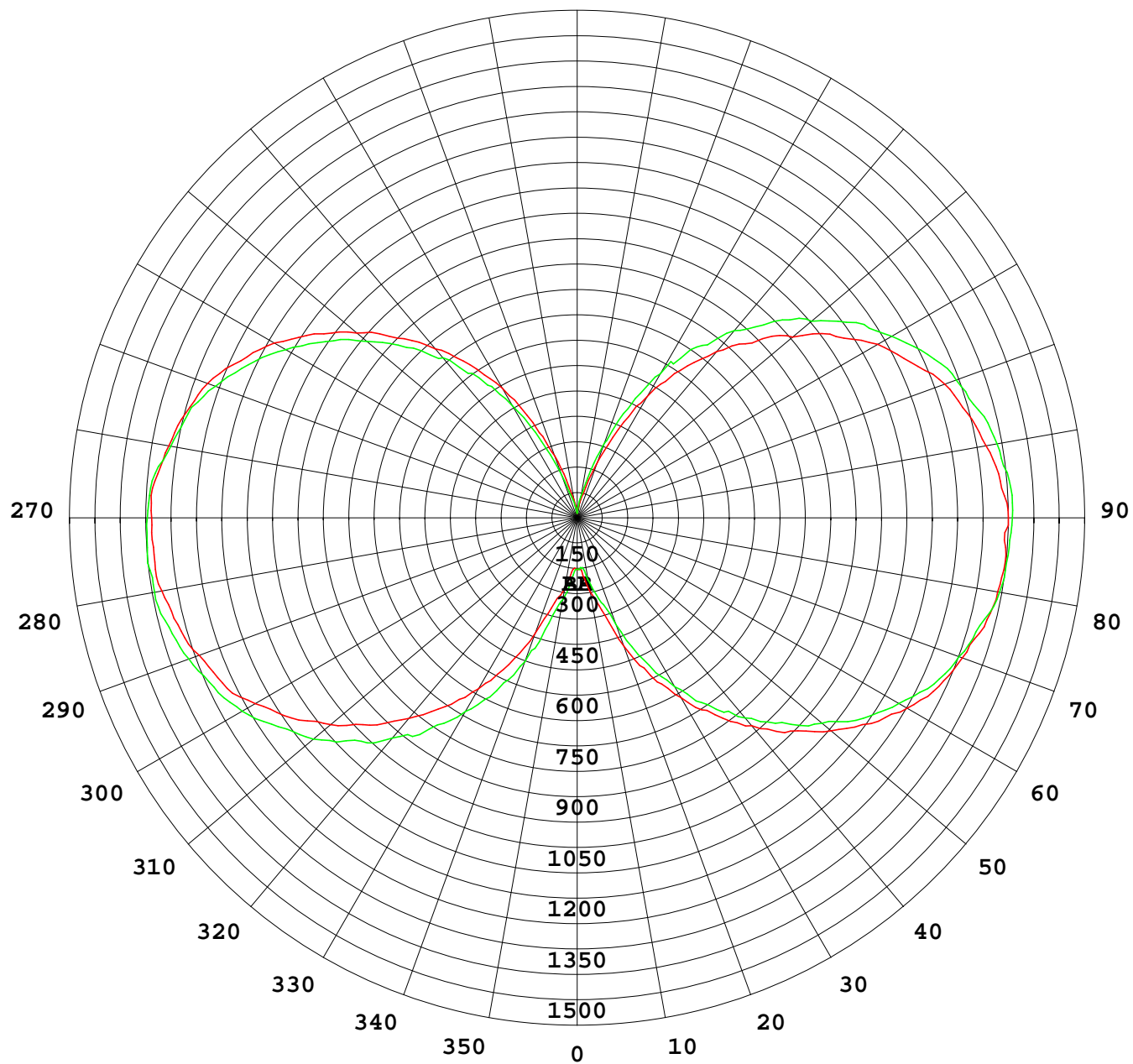
Photometric Data Table [cd]

69.0	1179	1188	1180	1152
72.0	1199	1206	1186	1172
75.0	1214	1221	1212	1194
78.0	1236	1246	1233	1211
81.0	1252	1258	1242	1227
84.0	1258	1265	1247	1236
87.0	1255	1263	1252	1240
90.0	1259	1266	1247	1240
93.0	1265	1268	1250	1244
96.0	1252	1259	1246	1237
99.0	1240	1246	1236	1223
102.0	1228	1230	1216	1207
105.0	1211	1210	1199	1188
108.0	1184	1191	1182	1174
111.0	1167	1172	1153	1147
114.0	1134	1139	1131	1117
117.0	1098	1102	1095	1086
120.0	1059	1062	1050	1038
123.0	1012	1020	1010	996.8
126.0	969.8	968.5	958.0	957.2
129.0	912.0	910.5	901.7	897.4
132.0	860.3	859.4	847.3	852.6
135.0	804.7	800.7	787.4	793.2
138.0	738.9	734.4	727.1	731.5
141.0	680.6	679.5	672.9	675.4
144.0	618.1	617.3	607.9	611.0
147.0	556.0	558.6	551.7	551.8
150.0	496.7	490.5	482.6	494.9
153.0	410.1	418.4	403.6	413.3
156.0	329.4	328.2	336.3	337.1
159.0	247.1	237.1	245.9	237.4
162.0	184.5	184.2	189.4	181.5
165.0	123.1	123.5	131.2	129.7
168.0	76.24	77.35	78.84	77.71
171.0	55.31	56.21	55.97	55.16
174.0	37.67	38.10	39.42	38.74
177.0	16.85	17.00	17.29	17.31
180.0	16.21	16.30	16.40	16.51

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 14 Feb 2020

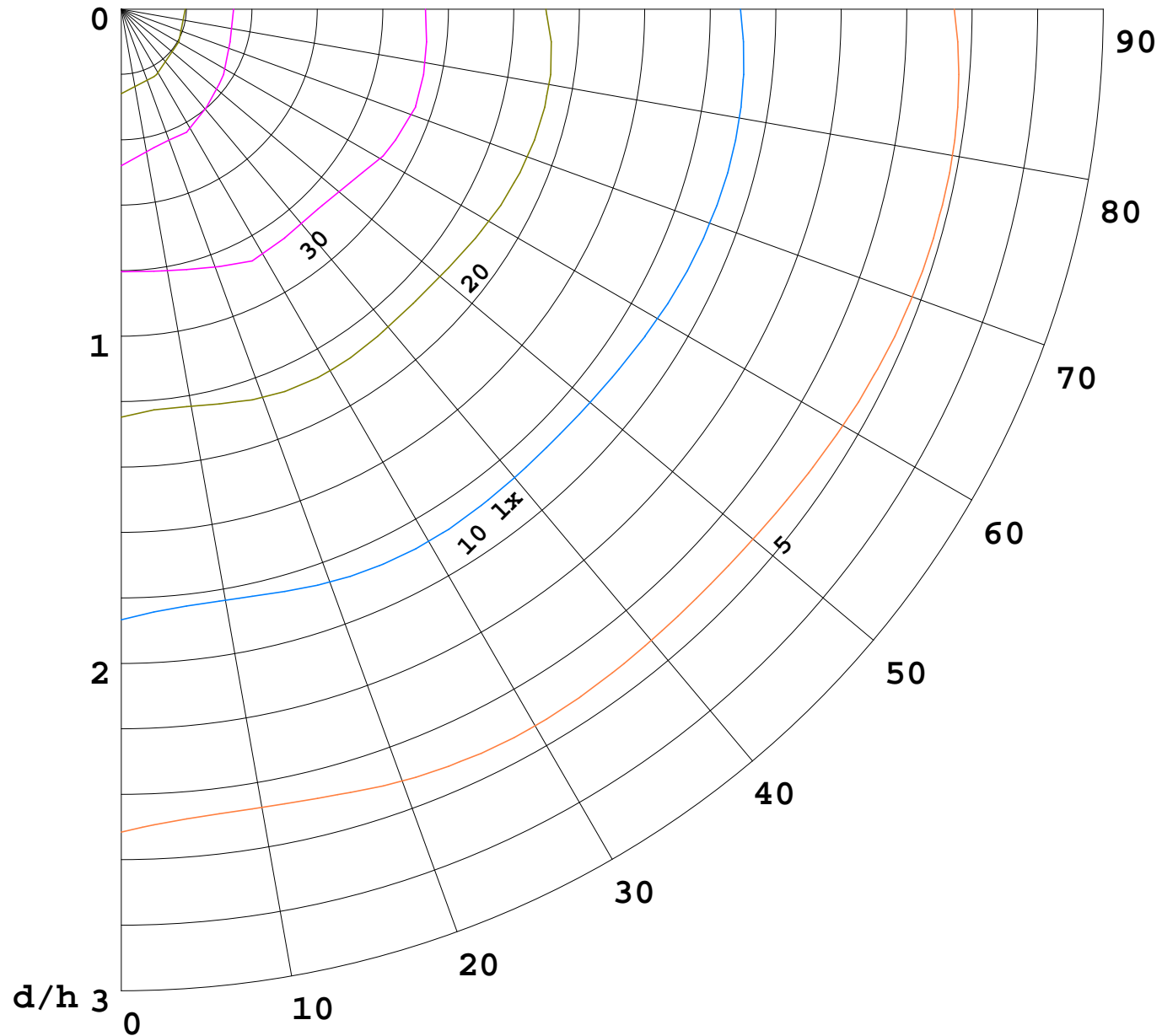
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: OBBC-80W L+ -3000K

I(cd)



1000 lm

$K = 1$



F = 1000 lm
K = 0.7
Hcc = 0.8 m
Hfc = 0.0 m
Eave = 100 lx

	Pcc	Pw	Pfc
—————	70	50	30
—————	50	30	20

