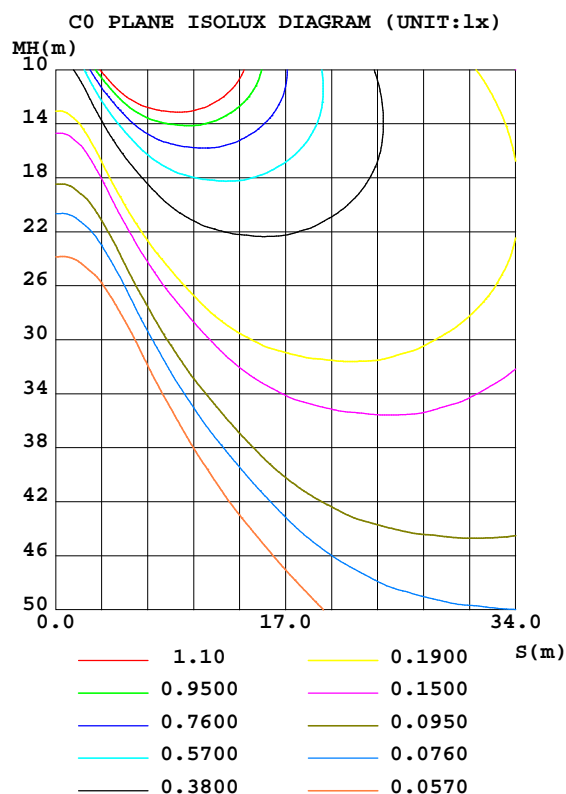
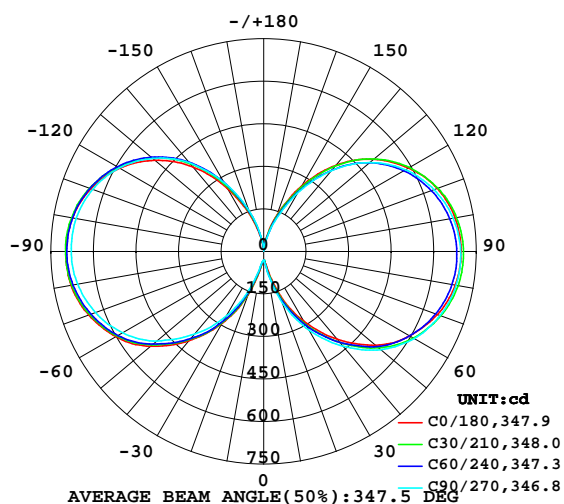


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 157.38 lm/W			
MODEL	OB200c-40W-3000K	Imax(cd)	704.7	S/MH(C0/180)	6.08
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	5.98
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	6538.2	η UP,DN(C0-180)	24.4,25.7
NOMINAL FLUX(lm)	6538.24	CIE CLASS	DIFFUSE	η UP,DN(C180-360)	25.0,24.8
LAMPS INSIDE	1	η up(%)	49.4	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	220	η down(%)	50.6	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	48.18	57.28	67.41	66.57	53.84	46.81	40.33	40.47	0- 10	3.881	3.881	0.06,0.06
20	153.6	170.0	190.9	184.6	164.1	152.2	132.4	132.4	10- 20	30.06	33.94	0.52,0.52
30	284.7	298.7	320.9	311.0	292.7	283.7	261.6	269.4	20- 30	106.8	140.8	2.15,2.15
40	404.6	417.6	436.2	426.4	412.0	406.6	380.7	389.1	30- 40	221.9	362.7	5.55,5.55
50	514.1	525.7	539.0	530.2	520.9	514.6	491.3	496.6	40- 50	360.1	722.8	11.1,11.1
60	594.6	605.1	614.2	601.6	601.5	599.9	573.8	582.0	50- 60	502.6	1225	18.7,18.7
70	651.7	659.5	661.9	652.0	656.5	654.3	631.1	639.2	60- 70	620.7	1846	28.2,28.2
80	685.9	690.8	689.1	679.9	689.6	688.9	666.2	674.8	70- 80	707.5	2554	39.1,39.1
90	696.1	699.3	694.2	684.8	697.4	700.8	678.9	687.7	80- 90	752.1	3306	50.6,50.6
100	685.5	686.2	678.4	668.7	684.7	690.3	671.5	680.0	90-100	750.6	4056	62,62
110	651.7	647.9	639.6	630.1	648.9	656.0	641.9	650.3	100-110	703.3	4760	72.8,72.8
120	589.1	585.7	577.1	568.5	587.0	595.2	588.9	596.7	110-120	613.1	5373	82.2,82.2
130	506.2	501.4	487.8	483.4	500.4	513.4	511.2	519.0	120-130	491.0	5864	89.7,89.7
140	397.3	386.6	371.8	368.6	389.1	405.6	408.0	411.8	130-140	349.8	6213	95,95
150	265.6	251.4	236.4	234.3	257.8	274.2	280.5	278.3	140-150	206.9	6420	98.2,98.2
160	135.9	127.5	112.1	113.3	130.0	142.3	153.7	152.5	150-160	91.42	6512	99.6,99.6
170	38.28	32.18	24.76	25.52	34.08	41.84	48.10	48.18	160-170	24.44	6536	100,100
180	8.222	8.194	8.292	8.310	8.213	8.213	8.292	8.306	170-180	1.980	6538	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 524.49 lm

%lum = 8.0%

%lamp = 8.0%

Conical surface Flux(120deg): 1225.4 lm

%lum = 18.7%

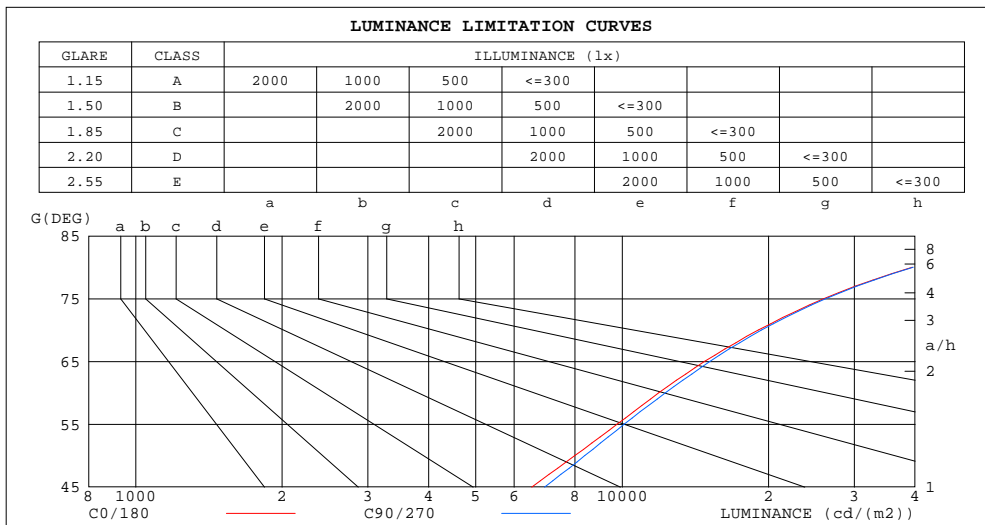
%lamp = 18.7%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

LUMINANCE LIMITATION CURVES

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	79613	79711
80	39501	39685
75	25975	26218
70	19055	19351
65	14777	15153
60	11892	12284
55	9774	10094
50	7998	8386
45	6515	6927

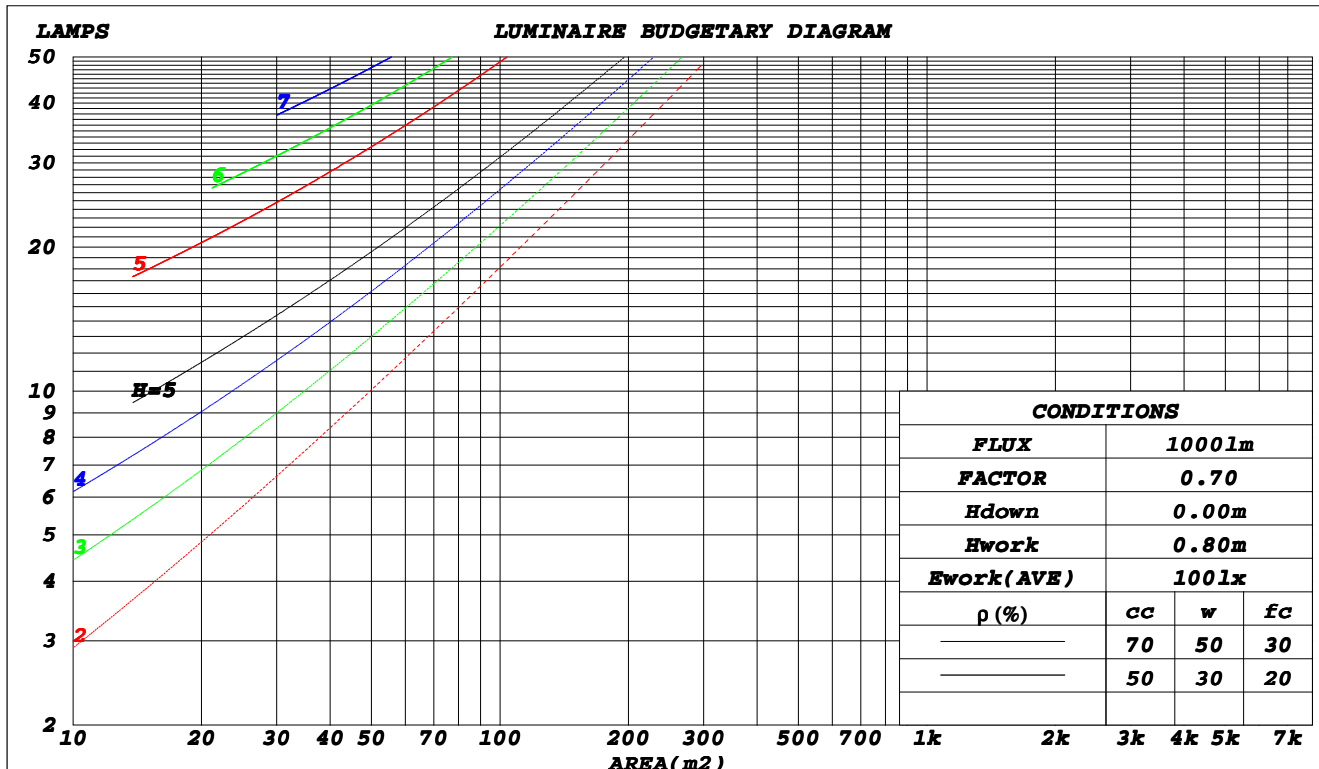
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 2020

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: OB200c-40W-3000K_20200110

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
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	1.07	1.07	1.07	.99	.99	.99	.84	.84	.84	.70	.70	.70	.57	.57	.57	.51
1.0	.85	.79	.73	.78	.72	.67	.64	.60	.56	.52	.49	.46	.41	.38	.36	.30
2.0	.71	.62	.55	.65	.57	.51	.53	.47	.42	.42	.38	.34	.32	.29	.26	.21
3.0	.60	.51	.43	.55	.46	.40	.45	.38	.33	.35	.30	.26	.27	.23	.19	.15
4.0	.52	.42	.35	.48	.39	.32	.39	.32	.26	.30	.25	.21	.23	.19	.15	.11
5.0	.46	.36	.29	.42	.33	.26	.34	.27	.21	.27	.21	.17	.20	.16	.12	.09
6.0	.40	.31	.24	.37	.28	.22	.30	.23	.18	.24	.18	.14	.18	.13	.10	.07
7.0	.36	.27	.20	.33	.24	.19	.27	.20	.15	.21	.16	.12	.16	.12	.08	.05
8.0	.32	.24	.17	.29	.21	.16	.24	.18	.13	.19	.14	.10	.14	.10	.07	.04
9.0	.29	.21	.15	.27	.19	.14	.22	.16	.11	.17	.12	.09	.13	.09	.06	.04
10.0	.27	.19	.13	.24	.17	.12	.20	.14	.10	.16	.11	.07	.12	.08	.05	.03



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

WEC AND CCEC

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
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	.443	.252	.080	.421	.240	.076	.379	.217	.069	.340	.196	.063	.305	.177	.057		
2.0	.364	.200	.061	.344	.189	.058	.305	.170	.053	.270	.152	.047	.237	.134	.042		
3.0	.315	.167	.050	.296	.158	.048	.261	.141	.043	.228	.125	.038	.198	.110	.034		
4.0	.278	.144	.042	.261	.137	.040	.229	.121	.036	.199	.107	.032	.171	.093	.028		
5.0	.249	.127	.037	.234	.120	.035	.204	.106	.031	.177	.093	.028	.151	.081	.024		
6.0	.226	.113	.032	.212	.107	.031	.185	.095	.028	.159	.083	.024	.135	.071	.021		
7.0	.207	.102	.029	.194	.097	.028	.169	.085	.025	.145	.074	.022	.123	.064	.019		
8.0	.191	.093	.026	.179	.088	.025	.155	.078	.022	.133	.067	.019	.112	.058	.017		
9.0	.177	.086	.024	.166	.081	.023	.144	.071	.020	.123	.062	.018	.104	.053	.015		
10.0	.165	.079	.022	.154	.075	.021	.134	.066	.018	.115	.057	.016	.096	.049	.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	.567	.567	.567	.485	.485	.485	.331	.331	.331	.190	.190	.190	.061	.061	.061		
1.0	.569	.535	.504	.487	.459	.433	.333	.316	.300	.192	.183	.174	.061	.059	.056		
2.0	.564	.514	.472	.483	.442	.408	.331	.306	.284	.191	.178	.167	.061	.058	.054		
3.0	.557	.499	.452	.478	.430	.392	.328	.299	.275	.190	.175	.162	.061	.057	.053		
4.0	.550	.488	.440	.472	.421	.382	.325	.294	.269	.188	.172	.159	.060	.056	.052		
5.0	.543	.479	.432	.466	.414	.376	.321	.289	.265	.186	.170	.157	.060	.055	.052		
6.0	.535	.472	.426	.460	.408	.371	.317	.286	.262	.184	.168	.156	.059	.055	.052		
7.0	.528	.466	.422	.454	.403	.367	.314	.283	.260	.182	.167	.155	.059	.055	.051		
8.0	.521	.460	.418	.449	.399	.365	.311	.280	.259	.181	.165	.154	.058	.054	.051		
9.0	.515	.456	.416	.444	.396	.363	.308	.278	.258	.179	.164	.154	.058	.054	.051		
10.0	.509	.452	.414	.439	.393	.361	.305	.276	.257	.178	.163	.153	.058	.054	.051		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

UGR(Unified Glare Rating) Table

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm											
NAME: OB200c-40W-3000K_20200110					TYPE:LED			WEIGHT:			
SPEC.:OB200c-40W-3000K_20200110					DIM.:			SERIAL No.:1			
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	18.0	19.2	18.9	20.1	21.2	18.0	19.2	18.9	20.1	21.2	
	3H	21.7	22.7	22.6	23.6	24.8	21.7	22.7	22.6	23.6	24.8
	4H	23.7	24.7	24.6	25.6	26.8	23.7	24.7	24.6	25.6	26.8
	6H	25.9	26.8	26.8	27.8	29.0	25.9	26.8	26.8	27.8	29.0
	8H	27.1	28.0	28.0	29.0	30.2	27.1	28.0	28.0	28.9	30.2
	12H	28.5	29.3	29.4	30.3	31.5	28.5	29.3	29.4	30.3	31.5
4H	2H	19.2	20.2	20.1	21.1	22.3	19.2	20.2	20.1	21.1	22.3
	3H	22.9	23.8	23.8	24.7	26.0	22.8	23.7	23.8	24.7	25.9
	4H	25.0	25.8	26.0	26.8	28.0	25.0	25.7	25.9	26.7	28.0
	6H	27.3	28.0	28.3	29.0	30.3	27.3	28.0	28.3	29.0	30.3
	8H	28.6	29.3	29.6	30.3	31.6	28.6	29.2	29.5	30.2	31.5
	12H	30.1	30.7	31.1	31.7	33.0	30.0	30.7	31.0	31.7	33.0
8H	4H	25.8	26.4	26.7	27.4	28.7	25.7	26.4	26.7	27.4	28.7
	6H	28.4	28.9	29.4	29.9	31.3	28.3	28.9	29.3	29.9	31.2
	8H	29.8	30.3	30.8	31.4	32.7	29.8	30.3	30.8	31.3	32.6
	12H	31.5	31.9	32.5	33.0	34.3	31.4	31.9	32.4	32.9	34.3
12H	4H	26.0	26.6	27.0	27.6	28.9	26.0	26.6	26.9	27.6	28.9
	6H	28.7	29.2	29.7	30.2	31.6	28.6	29.1	29.6	30.2	31.5
	8H	30.3	30.7	31.3	31.8	33.1	30.2	30.7	31.2	31.7	33.0
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 6538 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.5)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

UTILIZATION FACTORS TABLE

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

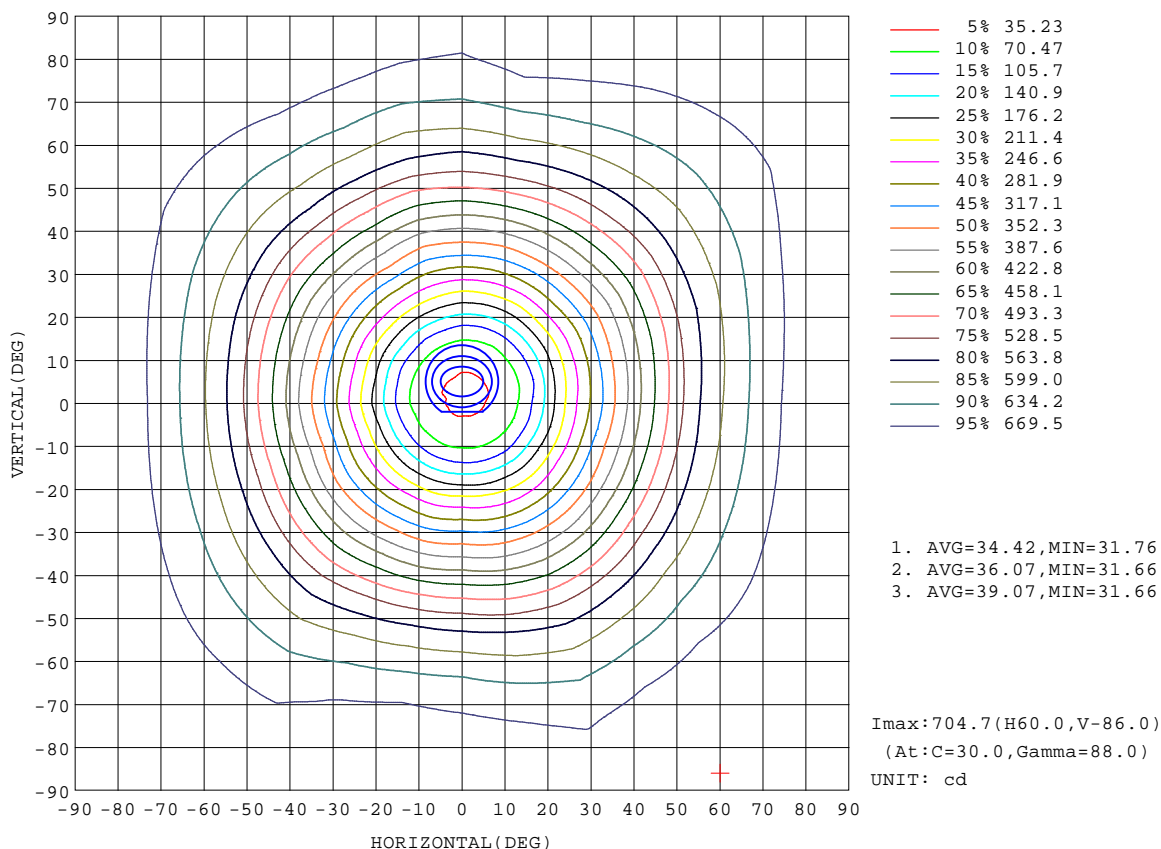
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	33	20	13	31	19	12	28	17	11	4
0.80	42	27	18	39	26	17	34	23	16	6
1.00	49	34	24	45	32	23	39	30	20	9
1.25	56	41	31	52	38	29	44	33	25	12
1.50	61	46	36	57	43	34	48	37	30	14
2.00	69	55	45	64	51	42	54	44	37	18
2.50	74	62	52	69	57	48	58	49	42	21
3.00	79	67	57	72	62	53	61	53	46	24
4.00	84	74	65	78	68	61	65	58	52	28
5.00	88	79	71	81	73	66	68	62	56	31
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

ISOCANDELA DIAGRAM

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

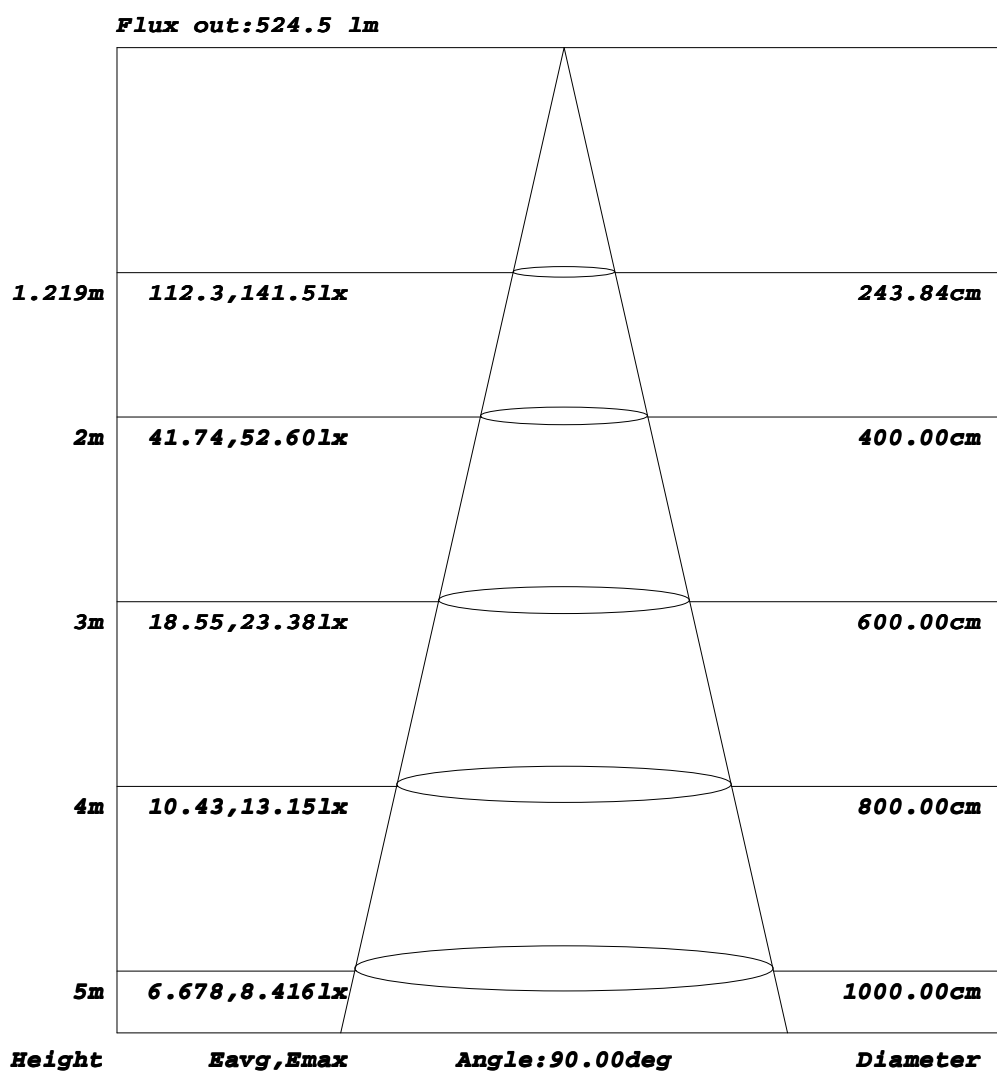


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 2020

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: OB200c-40W-3000K_20200110

AAI Figure

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



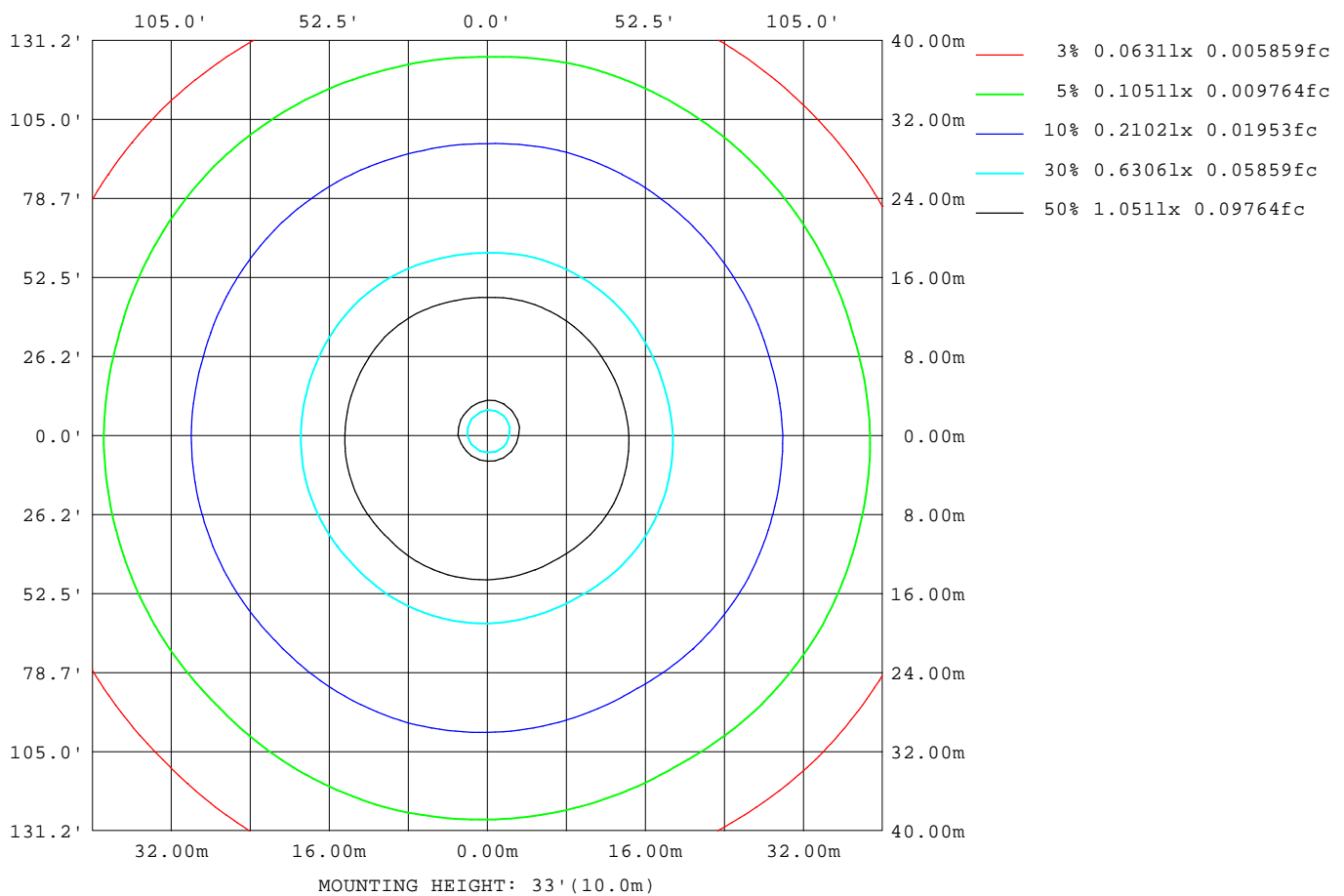
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 10 January 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: OB200c-40W-3000K_20200110

ISOLUX DIAGRAM

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 10 January 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: OB200c-40W-3000K_20200110

LED Avg.L Report

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

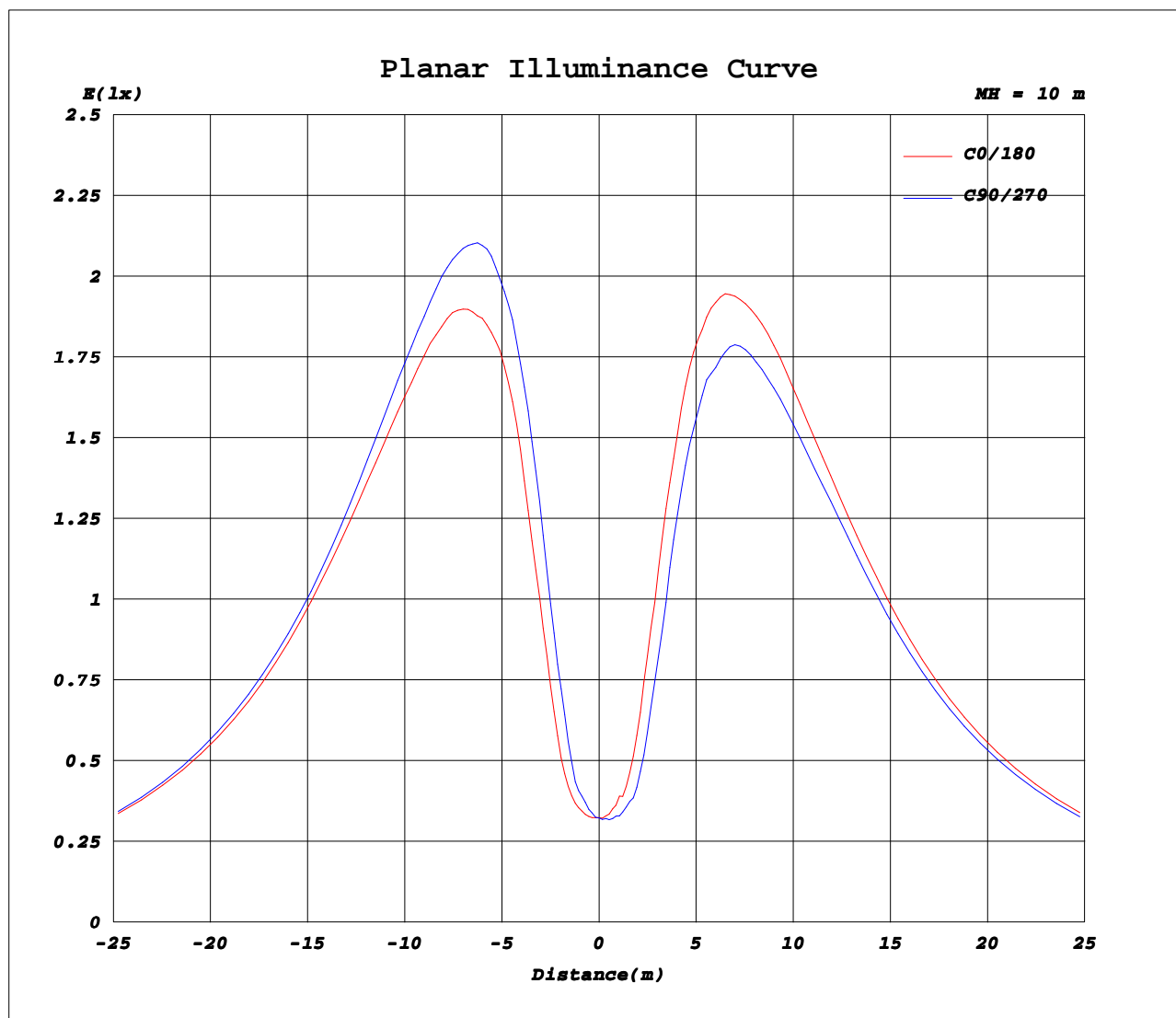
AvgL	cd/m2
L_0~180(65)av	14853
L_0~180(75)av	26044
L_0~180(85)av	79736
L_90~270(65)av	14749
L_90~270(75)av	25677
L_90~270(85)av	78608
L_45(65)av	14827
L_45(75)av	25906
L_45(85)av	79296

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 10 January 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: OB200c-40W-3000K_20200110

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
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	32.4	32.2	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.2	32.2	32.4	32.2	32.3	32.3	32.3	32.3	32.3
5	34.8	35.3	36.1	36.5	37.0	38.6	39.5	37.8	38.0	37.6	39.1	37.6	36.7	36.2	34.6	34.8	34.0	33.1	33.3
10	48.2	50.9	53.7	57.3	60.5	63.3	67.4	66.2	66.1	66.6	62.4	59.8	53.8	52.1	48.5	46.8	44.3	42.4	40.3
15	91.4	95.7	102	105	112	117	121	121	120	118	116	109	101	98.6	93.2	89.3	83.8	79.5	73.9
20	154	159	167	170	178	184	191	189	189	185	183	178	164	163	156	152	146	140	132
25	224	228	236	235	241	248	257	253	255	250	247	245	231	231	223	222	216	207	199
30	285	296	298	299	303	309	321	316	316	311	307	308	293	293	287	284	281	268	262
35	345	359	358	359	362	367	380	375	377	370	365	369	353	355	350	347	346	327	325
40	405	415	419	418	418	425	436	433	433	426	425	425	412	410	405	407	401	383	381
45	461	471	476	472	470	478	490	490	487	478	479	479	468	464	460	462	456	439	436
50	514	524	529	526	522	528	539	541	539	530	530	531	521	517	513	515	508	491	491
55	561	568	574	569	562	570	579	582	579	569	573	573	567	561	561	564	556	541	538
60	595	603	610	605	595	602	614	615	613	602	604	607	601	597	597	600	593	579	574
65	625	634	639	635	623	630	640	644	640	629	632	634	631	626	627	629	623	607	606
70	652	656	664	659	645	653	662	669	663	652	656	657	656	649	653	654	648	633	631
75	672	676	683	678	662	670	679	685	681	668	673	674	676	668	673	675	667	655	651
80	686	689	697	691	674	682	689	697	692	680	684	686	690	681	687	689	683	671	666
85	694	696	703	697	681	688	695	701	698	685	690	692	696	688	696	698	692	680	675
90	696	698	704	699	681	688	694	701	697	685	691	692	697	689	699	701	694	681	679
95	693	695	701	696	676	684	689	696	692	680	685	687	694	686	697	698	692	680	678
100	686	685	691	686	666	674	678	686	681	669	675	677	685	677	688	690	684	675	671
105	671	670	675	670	651	657	662	669	664	652	659	661	669	664	674	676	671	663	660
110	652	650	654	648	629	634	640	644	639	630	635	639	649	642	653	656	652	644	642
115	624	623	626	620	602	605	611	614	610	602	606	613	621	616	627	628	627	617	618
120	589	591	593	586	570	571	577	578	575	568	572	579	587	584	595	595	597	585	589
125	550	553	554	547	532	533	536	537	534	529	532	540	547	547	557	558	561	550	553
130	506	507	508	501	487	485	488	488	486	483	486	494	500	504	513	513	518	509	511
135	455	455	455	448	435	433	434	432	432	429	432	441	448	452	463	462	469	461	463
140	397	396	393	387	374	373	372	370	370	369	372	380	389	395	405	406	412	405	408
145	334	331	326	321	309	306	305	304	302	302	306	313	325	329	341	342	350	343	344
150	266	263	258	251	243	236	236	234	233	234	238	247	258	262	271	274	283	278	281
155	195	193	190	183	174	169	168	168	166	170	170	177	189	192	201	204	211	210	217
160	136	134	128	127	119	116	112	109	111	113	117	120	130	131	143	142	149	149	154
165	82.5	78.0	73.6	69.9	63.8	61.0	59.5	58.4	57.5	58.9	60.8	64.1	73.7	78.8	85.8	90.0	93.5	93.1	101
170	38.3	36.3	34.0	32.2	29.0	26.9	24.8	24.5	24.5	25.5	26.6	28.8	34.1	37.1	40.2	41.8	44.5	46.3	48.1
175	12.5	11.5	10.3	9.85	8.86	8.70	8.48	8.48	8.51	8.92	9.09	9.82	9.92	10.6	12.3	13.1	13.9	13.5	14.1
180	8.22	8.22	8.20	8.19	8.20	8.25	8.29	8.31	8.33	8.31	8.33	8.35	8.21	8.20	8.19	8.21	8.21	8.25	8.29

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ARK

Test Date:10 January 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: OB200c-40W-3000K_20200110

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.7V I:0.1950A P:41.54W PF:0.9697 Lamp Flux:6538.24x1 lm		
NAME: OB200c-40W-3000K_20200110	TYPE:LED	WEIGHT:
SPEC.:OB200c-40W-3000K_20200110	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	32.3	32.3	32.3	32.2	32.2														
5	32.9	33.5	33.3	33.1	33.7														
10	40.3	40.2	40.5	41.8	44.2														
15	71.9	70.8	75.2	77.6	83.0														
20	130	130	132	138	144														
25	197	197	203	205	213														
30	261	262	269	267	276														
35	323	326	329	330	339														
40	382	386	389	384	395														
45	439	442	444	441	449														
50	495	496	497	493	501														
55	544	544	544	542	546														
60	583	582	582	580	580														
65	615	615	614	608	611														
70	643	642	639	636	637														
75	665	663	660	658	656														
80	680	678	675	674	671														
85	690	689	685	682	679														
90	694	693	688	684	682														
95	693	692	687	683	680														
100	687	685	680	678	672														
105	673	673	668	667	659														
110	655	654	650	649	641														
115	631	631	626	622	617														
120	601	600	597	591	586														
125	563	564	561	556	549														
130	519	522	519	514	506														
135	469	472	470	463	457														
140	410	412	412	406	403														
145	345	346	345	341	340														
150	280	280	278	276	274														
155	216	215	212	209	206														
160	154	155	152	151	145														
165	99.4	102	99.6	96.0	95.2														
170	49.4	49.1	48.2	46.9	44.9														
175	14.3	16.0	16.2	16.0	13.9														
180	8.32	8.34	8.31	8.34	8.36														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:10 January 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: OB200c-40W-3000K_20200110

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	32.43	32.23	32.29	32.32	32.33	32.34	32.33	32.33	32.25	32.25
3.0	32.91	33.12	33.26	33.66	34.63	35.30	35.14	35.03	34.67	34.90
6.0	36.10	36.57	37.84	38.91	39.75	40.10	41.46	40.54	40.61	40.21
9.0	43.72	45.92	48.03	50.78	52.58	55.25	58.10	57.21	57.51	56.77
12.0	61.71	65.46	70.44	74.82	78.90	83.84	85.34	85.74	85.79	85.58
15.0	91.40	95.67	102.4	104.6	111.9	116.6	120.6	121.4	120.5	117.9
18.0	126.8	132.1	140.2	143.1	151.6	157.3	162.4	162.3	162.2	158.3
21.0	168.0	173.8	182.0	184.4	190.4	197.9	203.7	201.0	201.6	198.2
24.0	211.4	215.9	221.5	221.4	227.1	236.1	244.7	242.2	241.7	237.0
27.0	250.4	256.9	260.9	260.7	265.1	271.3	281.7	277.1	279.0	274.0
30.0	284.7	296.2	297.7	298.7	302.5	309.2	320.9	315.9	315.8	311.0
33.0	320.4	334.9	333.5	335.9	339.7	344.8	356.0	351.2	353.7	347.8
36.0	357.8	370.0	371.7	370.4	373.1	379.5	390.8	387.9	387.3	381.4
39.0	392.8	403.3	407.7	406.0	408.1	413.4	425.8	422.0	422.6	415.7
42.0	427.4	437.4	442.0	439.3	439.4	446.2	457.1	455.8	455.5	447.8
45.0	460.7	471.2	475.9	471.5	470.2	477.9	489.8	489.9	486.8	478.2
48.0	493.1	503.3	509.2	505.2	502.7	508.9	520.5	521.0	518.9	510.8
51.0	524.2	533.9	538.8	535.7	531.0	537.8	547.6	550.1	547.8	539.1
54.0	552.1	560.0	564.9	561.6	554.8	562.9	572.0	574.8	571.4	562.1
57.0	575.6	582.7	589.5	583.9	575.9	583.1	593.7	596.5	593.6	582.9
60.0	594.6	603.4	610.5	605.1	595.0	601.8	614.2	615.4	612.8	601.6
63.0	612.8	622.3	628.5	623.3	611.8	619.0	631.1	633.1	629.4	619.0
66.0	630.4	638.7	645.2	639.8	627.6	634.8	644.5	649.5	645.7	634.4
69.0	646.0	652.2	660.5	655.1	640.9	649.1	664.4	664.4	659.7	648.0
72.0	660.8	665.0	672.7	667.6	652.4	660.9	669.3	676.3	671.3	659.8
75.0	672.3	675.7	683.0	678.4	662.5	670.4	678.6	685.4	680.6	668.4
78.0	681.3	684.1	691.8	687.2	670.2	677.9	685.0	693.6	688.1	676.3
81.0	688.2	690.7	698.0	692.7	675.9	682.7	690.4	698.9	693.1	681.8
84.0	693.2	695.1	702.0	696.6	679.5	687.0	693.9	701.1	696.3	683.8
87.0	695.9	697.2	704.1	699.1	681.6	688.3	694.9	701.4	697.1	685.6
90.0	696.1	698.0	704.4	699.3	680.9	687.8	694.2	701.1	697.0	684.8
93.0	695.0	696.2	702.8	697.9	679.0	685.7	691.6	698.7	694.4	682.3
96.0	691.2	692.7	698.9	693.8	675.0	682.1	687.3	694.6	690.2	677.7
99.0	687.2	687.4	693.0	688.5	669.0	676.2	680.8	688.4	683.9	671.7
102.0	680.3	680.1	685.3	680.1	660.7	668.1	672.3	679.8	674.5	662.6
105.0	671.2	670.3	675.3	669.7	650.6	657.3	662.1	668.6	663.9	651.7
108.0	659.8	658.1	662.7	657.5	638.8	644.2	648.5	654.8	649.9	639.3
111.0	646.0	644.5	648.3	642.4	628.6	634.5	638.5	643.8	638.8	624.2
114.0	630.4	629.1	632.1	625.3	608.1	611.1	616.7	619.9	616.1	607.3
117.0	610.7	611.0	613.2	606.5	590.0	591.9	597.7	599.6	596.7	588.9
120.0	589.1	591.0	593.4	585.7	570.3	571.1	577.1	578.4	575.1	568.5
123.0	565.7	569.0	570.3	563.5	548.0	549.0	553.1	554.0	551.6	545.7
126.0	541.9	543.7	545.1	538.6	523.6	524.1	527.1	527.3	525.3	520.0
129.0	515.4	516.4	517.2	511.3	496.7	495.8	498.1	498.5	496.3	493.1
132.0	486.7	486.4	487.4	480.9	467.2	464.6	467.1	465.9	465.6	463.4
135.0	455.2	454.6	455.4	447.9	435.2	432.6	433.7	431.7	431.6	429.4
138.0	421.6	420.4	418.6	412.0	399.9	398.1	397.5	394.8	395.8	393.4
141.0	384.7	383.3	380.3	373.2	361.3	360.4	358.7	357.2	356.6	355.5
144.0	347.0	344.6	339.6	334.4	322.5	319.4	318.0	317.7	315.5	315.4
147.0	306.5	304.3	299.2	293.1	282.6	279.9	277.4	275.5	275.9	275.5
150.0	265.6	263.5	258.0	251.4	243.2	236.1	236.4	233.7	232.6	234.3
153.0	223.4	220.5	214.3	209.7	200.3	193.3	193.6	191.1	191.1	194.1
156.0	181.8	180.2	177.1	171.7	162.7	158.4	156.4	155.8	153.4	156.6
159.0	146.9	144.2	140.2	137.7	129.6	127.1	121.7	122.4	122.7	123.9
162.0	115.3	110.8	107.5	104.8	100.8	93.22	90.35	90.30	90.15	92.40
165.0	82.50	78.02	73.61	69.92	63.80	61.01	59.45	58.36	57.46	58.88
168.0	52.90	50.34	47.07	45.16	41.13	38.33	36.30	36.11	36.03	37.08
171.0	32.91	30.26	28.14	26.46	23.67	21.73	20.18	20.04	19.69	20.58
174.0	17.18	16.07	14.81	13.89	12.32	11.62	10.92	10.81	10.81	11.18
177.0	8.231	8.208	8.208	8.180	8.189	8.199	8.240	8.250	8.278	8.278
180.0	8.222	8.217	8.199	8.194	8.203	8.250	8.292	8.306	8.334	8.320
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	32.17	32.18	32.43	32.23	32.29	32.32	32.33	32.34	32.33	32.33
3.0	34.43	34.65	33.69	33.56	33.46	32.86	32.38	32.49	31.94	31.75
6.0	40.07	40.02	39.76	38.21	36.39	35.46	35.33	35.04	33.53	33.72
9.0	54.06	52.58	48.18	45.13	43.53	42.14	40.93	39.14	38.86	37.94
12.0	82.89	78.47	69.48	66.19	64.45	60.36	56.02	53.19	49.99	49.07
15.0	116.1	109.4	101.1	98.64	93.17	89.26	83.82	79.48	73.89	71.91
18.0	154.4	149.7	138.1	136.7	127.6	126.0	115.8	112.6	104.9	102.5
21.0	195.4	192.2	176.5	177.8	169.9	166.2	159.6	151.7	145.6	142.0
24.0	235.1	231.4	217.6	217.6	210.7	208.8	202.9	194.5	185.4	182.1
27.0	269.7	269.9	255.2	256.1	249.5	248.7	242.0	232.3	223.7	223.9
30.0	307.1	308.1	292.7	293.2	287.4	283.7	280.8	267.7	261.6	260.8

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: ARK

Test Date: 10 January 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: OB200c-40W-3000K_20200110

Photometric Data Table [cd]

33.0	342.5	345.3	329.9	330.6	325.2	322.8	320.5	304.0	299.3	297.3
36.0	377.4	380.1	364.1	366.1	361.4	358.7	358.1	337.6	336.8	334.4
39.0	413.4	414.1	399.9	399.2	393.5	394.5	390.4	371.6	369.3	369.8
42.0	447.5	446.8	435.2	432.0	427.2	429.5	423.8	405.9	403.0	404.9
45.0	479.4	478.7	467.7	464.5	460.4	462.0	456.4	438.7	436.2	439.1
48.0	509.7	511.8	499.8	495.2	491.5	494.1	487.1	470.4	468.3	473.1
51.0	539.6	540.4	530.7	526.1	523.0	525.2	519.0	501.1	501.9	504.6
54.0	565.6	564.7	558.4	552.7	551.9	555.0	547.1	532.6	529.5	534.7
57.0	585.9	586.9	582.0	575.4	576.4	579.0	572.0	558.6	552.9	560.6
60.0	603.9	606.5	601.5	596.8	596.9	599.9	593.3	578.7	573.8	583.0
63.0	621.0	623.8	619.4	614.4	615.9	618.1	611.8	595.6	593.0	602.7
66.0	637.4	639.4	636.4	631.1	632.1	634.2	628.2	612.4	611.3	620.5
69.0	651.6	652.7	651.6	645.1	647.9	650.3	642.9	628.2	626.3	637.3
72.0	663.1	664.4	665.3	657.8	661.9	663.5	656.3	643.0	639.1	652.1
75.0	672.7	674.3	675.9	668.0	673.2	675.3	667.4	655.1	650.6	664.7
78.0	680.1	681.9	685.0	676.3	682.3	684.6	677.1	665.6	660.5	674.1
81.0	686.5	687.7	691.6	682.1	690.5	691.1	684.8	673.2	668.7	683.1
84.0	689.5	691.3	695.1	687.0	695.0	696.4	690.0	678.4	674.0	688.8
87.0	690.7	692.6	696.9	689.4	697.9	699.6	693.6	680.7	677.7	692.5
90.0	691.1	692.3	697.4	689.4	698.9	700.8	694.2	681.5	678.9	694.3
93.0	688.2	689.9	695.8	688.2	698.5	700.0	693.2	681.5	678.7	694.1
96.0	684.1	685.4	692.3	685.1	695.4	696.7	691.0	678.9	676.9	692.1
99.0	678.3	680.3	687.5	680.3	690.2	692.3	686.1	676.3	673.1	687.8
102.0	669.1	671.6	679.5	672.6	683.2	685.5	679.8	671.6	667.4	681.7
105.0	658.7	661.3	669.5	663.7	673.7	676.3	671.3	663.3	659.6	673.5
108.0	644.8	649.5	657.5	651.7	662.4	665.0	660.3	652.8	649.2	663.2
111.0	629.7	634.8	643.3	637.5	648.7	650.6	647.7	639.5	637.3	651.3
114.0	612.1	618.6	627.5	622.2	632.8	633.7	633.0	623.1	623.6	636.8
117.0	593.0	600.5	608.2	604.3	614.2	615.9	616.2	604.9	607.3	619.8
120.0	572.4	579.2	587.0	584.3	594.5	595.2	597.1	584.8	588.9	600.6
123.0	549.2	556.6	563.5	563.0	572.9	573.3	575.9	564.2	568.7	579.0
126.0	523.2	531.6	537.8	539.0	548.9	549.7	552.4	542.7	545.2	555.8
129.0	495.9	504.1	510.1	513.0	522.0	522.9	526.6	517.7	519.3	528.2
132.0	465.6	474.0	480.2	483.9	493.5	494.0	498.8	491.1	493.1	500.0
135.0	432.5	440.6	448.3	452.5	462.9	462.3	468.5	460.5	463.4	468.8
138.0	396.8	405.5	413.9	419.0	428.8	429.1	435.6	428.7	431.7	434.5
141.0	358.9	366.4	376.8	382.4	392.1	393.3	399.6	393.1	395.7	396.9
144.0	319.4	326.1	338.0	342.4	353.3	355.1	362.3	356.2	356.9	357.6
147.0	278.4	285.8	299.1	301.8	313.2	315.3	323.1	316.7	318.7	319.2
150.0	237.5	246.5	257.8	262.1	270.8	274.2	283.3	277.7	280.5	279.5
153.0	196.1	203.2	215.0	221.7	229.0	231.5	240.0	236.7	243.9	240.9
156.0	159.1	164.0	176.2	178.7	187.9	191.0	198.3	195.9	203.8	202.7
159.0	126.8	130.9	140.9	142.8	153.2	152.7	160.0	159.5	165.8	166.7
162.0	93.12	98.30	107.8	111.5	117.9	122.2	127.1	127.6	129.5	132.0
165.0	60.79	64.08	73.67	78.76	85.84	90.01	93.48	93.10	100.6	99.39
168.0	38.64	41.17	47.57	50.83	54.16	56.84	59.98	61.09	63.55	64.55
171.0	21.42	23.72	28.47	30.76	33.82	35.18	37.18	39.33	41.15	41.93
174.0	11.69	12.72	14.78	16.11	17.79	18.13	18.13	19.09	20.94	21.03
177.0	8.301	8.310	8.171	8.162	8.162	8.176	8.203	8.241	8.273	8.310
180.0	8.334	8.352	8.213	8.203	8.194	8.213	8.213	8.250	8.292	8.320
G/C	300.0	315.0	330.0	345.0						
0.0	32.25	32.25	32.17	32.18						
3.0	31.85	31.74	32.03	32.83						
6.0	33.44	34.22	34.40	34.84						
9.0	37.63	38.14	38.93	39.35						
12.0	49.57	51.23	51.78	54.86						
15.0	70.81	75.16	77.60	82.98						
18.0	103.2	107.1	110.5	114.1						
21.0	143.0	146.7	152.1	157.7						
24.0	183.8	189.0	191.9	200.6						
27.0	223.6	229.5	231.6	237.7						
30.0	262.5	269.4	267.3	275.8						
33.0	301.8	306.1	305.0	313.6						
36.0	339.1	341.7	341.2	350.3						
39.0	374.4	377.6	373.2	383.0						
42.0	408.8	412.2	407.5	417.4						
45.0	441.8	444.2	440.8	448.7						
48.0	475.2	475.3	472.0	478.7						
51.0	507.0	507.5	502.9	511.4						
54.0	535.5	536.6	532.6	538.1						
57.0	559.9	559.8	558.6	560.9						
60.0	581.7	582.0	579.8	579.8						
63.0	602.7	602.0	597.3	599.1						
66.0	621.0	618.6	613.8	617.5						

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 10 January 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: OB200c-40W-3000K_20200110

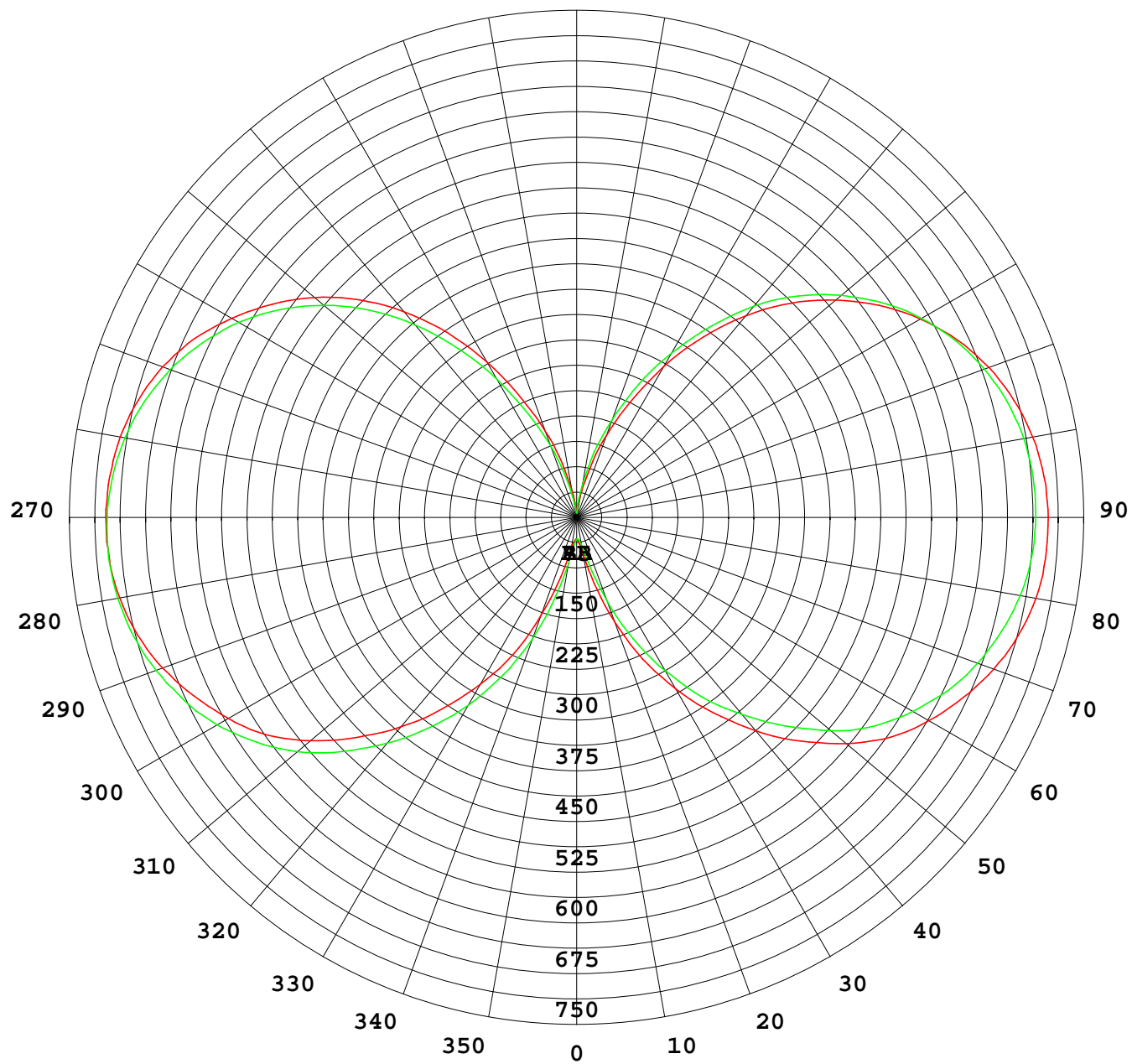
Photometric Data Table [cd]

69.0	637.1	634.2	630.4	632.4
72.0	651.4	648.4	645.7	644.9
75.0	663.2	659.9	658.4	656.3
78.0	673.0	669.9	668.3	665.5
81.0	680.9	677.5	676.2	672.2
84.0	687.2	683.2	681.1	677.4
87.0	691.7	687.1	683.2	680.6
90.0	692.9	687.7	684.3	681.6
93.0	692.5	688.5	683.6	681.1
96.0	690.5	686.0	682.0	678.6
99.0	685.9	681.8	679.2	674.3
102.0	680.3	676.0	674.0	668.1
105.0	672.6	668.0	666.5	659.4
108.0	662.1	658.0	656.4	649.2
111.0	650.2	646.3	644.3	636.8
114.0	635.2	632.0	627.9	621.7
117.0	618.9	615.2	610.0	605.0
120.0	599.7	596.7	590.8	586.0
123.0	579.4	575.6	570.5	564.6
126.0	556.3	553.0	547.7	540.7
129.0	530.7	527.8	522.8	515.1
132.0	502.4	500.1	494.9	487.1
135.0	471.9	469.9	463.0	457.4
138.0	437.1	436.7	429.9	425.7
141.0	398.9	398.7	393.3	390.4
144.0	359.4	358.8	354.3	352.9
147.0	318.9	317.1	313.8	314.7
150.0	280.3	278.3	275.5	274.5
153.0	241.0	238.7	235.0	235.4
156.0	203.3	200.3	195.9	191.6
159.0	167.6	164.7	161.8	156.2
162.0	133.4	131.2	129.7	122.6
165.0	101.9	99.55	96.05	95.16
168.0	66.16	63.88	62.72	59.77
171.0	42.35	41.30	40.60	38.25
174.0	21.33	22.31	22.85	21.14
177.0	8.329	8.320	8.320	8.329
180.0	8.338	8.306	8.338	8.357

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 10 January 2020

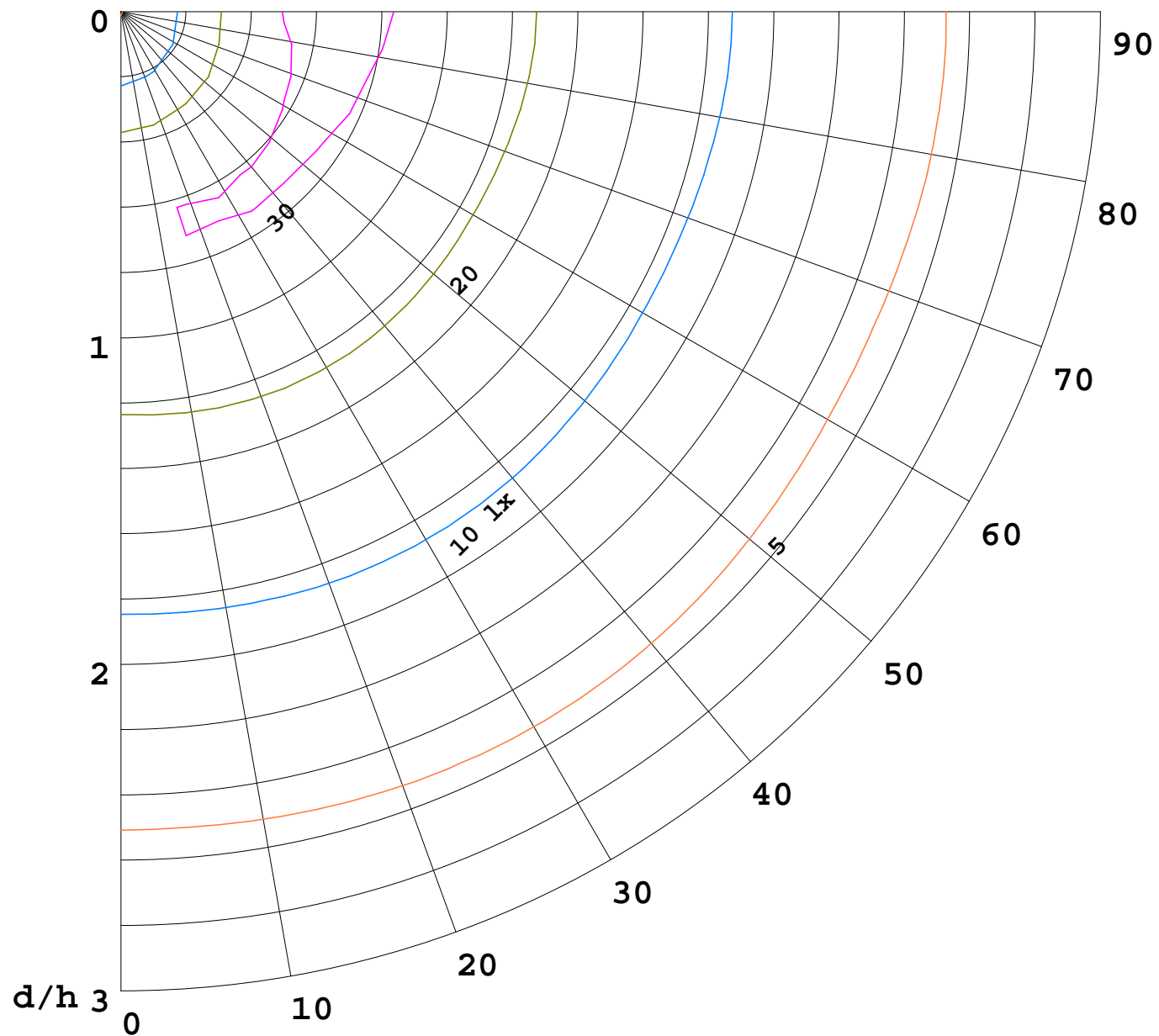
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: OB200c-40W-3000K_20200110

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

