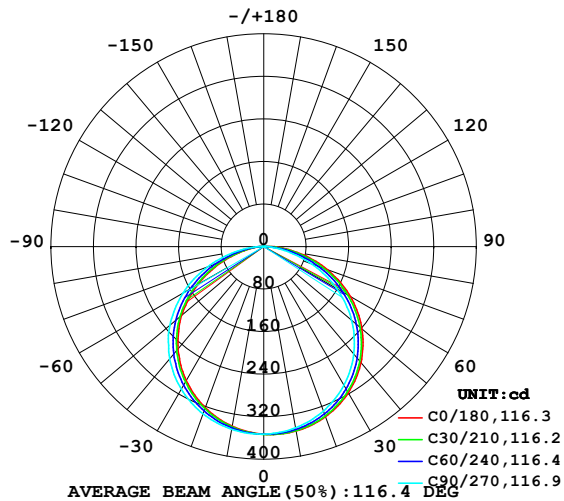


LUMINAIRE PHOTOMETRIC TEST REPORT

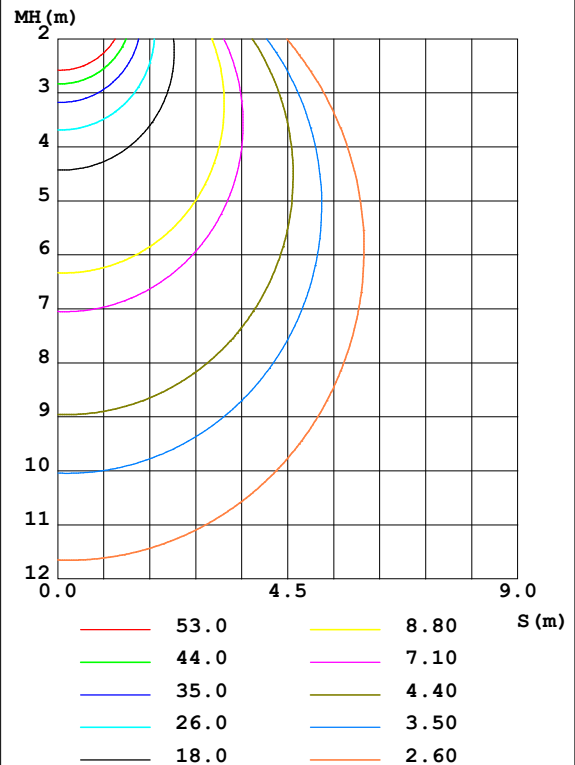
Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.68 lm/W			
MODEL		I _{max} (cd)	353.8	S/MH(C0/180)	1.23
NOMINAL POWER(W)	10.6	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1067.3	η UP,DN(C0-180)	0.3,49.3
NOMINAL FLUX(lm)	1067.25	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.5,49.8
LAMPS INSIDE	1	η up(%)	0.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	η down(%)	99.1	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	352.0	350.2	346.0	342.9	342.8	345.1	348.8	351.6	0- 10	33.42	33.42	3.13,3.13
20	340.4	336.6	329.0	322.9	322.1	326.6	334.5	340.1	10- 20	96.24	129.7	12.1,12.1
30	317.8	312.2	301.4	292.6	291.2	297.7	309.8	318.0	20- 30	147.4	277.0	26,26
40	284.6	277.3	263.6	252.7	251.0	259.1	275.4	285.6	30- 40	180.3	457.3	42.8,42.8
50	241.0	231.9	215.7	203.1	201.8	211.0	230.7	242.7	40- 50	190.1	647.4	60.7,60.7
60	188.5	177.5	159.3	145.3	143.5	154.1	175.4	190.5	50- 60	174.5	821.9	77,77
70	128.0	115.8	95.68	82.62	81.70	92.06	113.2	118.5	60- 70	134.0	956.0	89.6,89.6
80	63.78	53.01	34.25	26.46	28.92	34.11	50.10	63.26	70- 80	77.14	1033	96.8,96.8
90	17.17	9.573	0.6836	1.569	4.132	4.750	4.896	14.19	80- 90	24.70	1058	99.1,99.1
100	1.730	0.8707	0.6159	0.8539	1.666	1.933	1.540	1.901	90-100	3.565	1061	99.4,99.4
110	0.6302	0.5922	0.5900	0.7742	1.473	1.489	1.474	1.511	100-110	1.225	1063	99.6,99.6
120	0.6350	0.6107	0.6308	0.8022	1.457	1.472	1.460	1.479	110-120	1.061	1064	99.7,99.7
130	0.7118	0.6772	0.6967	0.9073	1.440	1.481	1.483	1.495	120-130	0.9863	1065	99.8,99.8
140	0.7693	0.7376	0.7758	0.9730	1.406	1.468	1.500	1.485	130-140	0.8792	1066	99.8,99.8
150	0.8336	0.8075	0.8636	1.052	1.355	1.428	1.486	1.467	140-150	0.7280	1066	99.9,99.9
160	0.9353	0.9273	1.004	1.156	1.298	1.369	1.458	1.443	150-160	0.5496	1067	100,100
170	1.091	1.074	1.153	1.252	1.223	1.291	1.396	1.420	160-170	0.3474	1067	100,100
180	1.132	1.190	1.271	1.314	1.137	1.187	1.298	1.393	170-180	0.1190	1067	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 552.66 lm

%lum = 51.8%

%lamp = 51.8%

Conical surface Flux(120deg): 821.95 lm

%lum = 77.0%

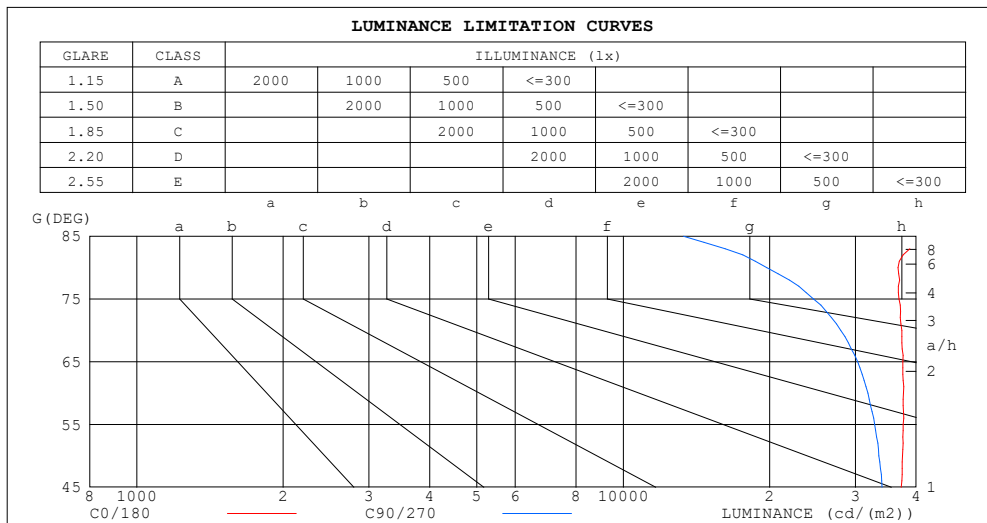
%lamp = 77.0%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	41927	13306
80	36731	19725
75	36891	24616
70	37413	27976
65	37590	30319
60	37692	31856
55	37628	32865
50	37496	33550
45	37303	34016

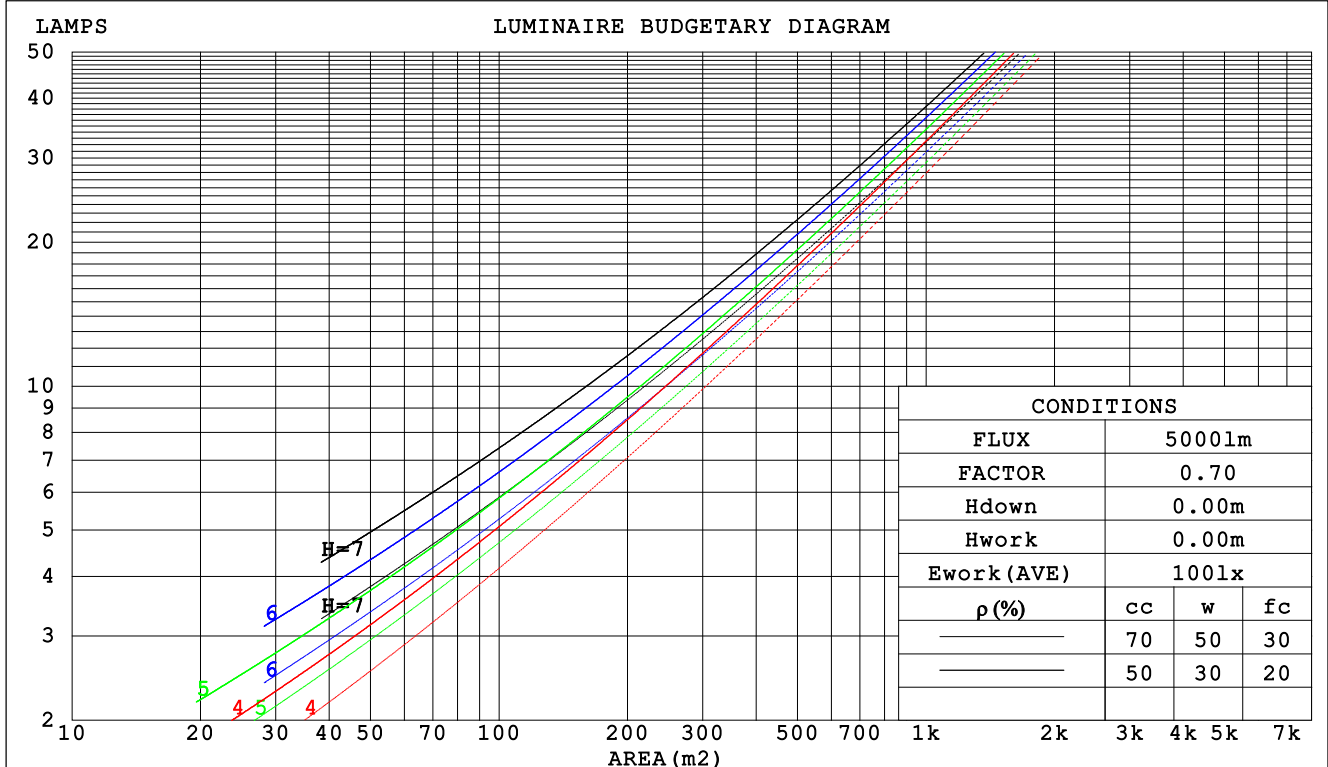
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.90	.87	.89	.86	.84	.82
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.77	.74	.70	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.65	.60	.68	.63	.59	.57
4.0	.69	.60	.54	.68	.60	.53	.65	.58	.52	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.58	.51	.45	.56	.50	.45	.54	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.39	.36
7.0	.50	.41	.35	.50	.41	.35	.48	.40	.35	.46	.40	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.29
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.25	.38	.31	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

WEC AND CCEC

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz					
Lamp Flux:1067.25x1 lm					
Name: S010120BC2PZ-混光					
MFR.:					

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.317	.180	.057	.310	.177	.056	.296	.170	.054	.283	.163	.052	.272	.157	.051		
2.0	.297	.163	.050	.290	.160	.049	.278	.155	.048	.267	.150	.047	.256	.145	.046		
3.0	.274	.146	.044	.268	.144	.043	.257	.139	.042	.247	.135	.042	.238	.132	.041		
4.0	.252	.131	.039	.247	.129	.038	.237	.126	.038	.228	.123	.037	.220	.120	.036		
5.0	.233	.119	.034	.228	.117	.034	.220	.114	.034	.212	.112	.033	.204	.109	.033		
6.0	.216	.108	.031	.212	.107	.031	.204	.105	.030	.197	.102	.030	.190	.100	.030		
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027		
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.167	.085	.025		
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023		
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.074	.021		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.197	.197	.197	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.188	.163	.141	.161	.140	.121	.110	.096	.084	.063	.056	.049	.020	.018	.016	
2.0	.180	.139	.104	.154	.119	.090	.106	.083	.063	.061	.048	.037	.020	.016	.012	
3.0	.172	.121	.081	.148	.105	.070	.101	.073	.049	.059	.042	.029	.019	.014	.009	
4.0	.165	.108	.065	.141	.093	.056	.097	.065	.040	.056	.038	.023	.018	.012	.008	
5.0	.157	.098	.054	.135	.084	.047	.093	.059	.033	.054	.035	.020	.017	.011	.006	
6.0	.150	.089	.046	.129	.077	.040	.089	.054	.028	.052	.032	.017	.017	.010	.006	
7.0	.143	.082	.040	.123	.071	.035	.085	.050	.025	.049	.030	.015	.016	.010	.005	
8.0	.137	.077	.036	.118	.066	.031	.081	.047	.022	.047	.028	.013	.015	.009	.004	
9.0	.130	.072	.032	.112	.062	.028	.078	.044	.020	.045	.026	.012	.015	.008	.004	
10.0	.125	.067	.029	.107	.059	.026	.075	.041	.018	.043	.024	.011	.014	.008	.004	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz										
Lamp Flux:1067.25x1 lm										
Name: S010120BC2PZ-混光										
MFR.:										
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	27.3	26.0	27.5	27.7	25.2	26.7	25.4	26.9	27.1
3H	27.5	29.0	27.9	29.2	29.5	26.6	28.0	26.9	28.3	28.5
4H	28.3	29.7	28.6	29.9	30.2	27.2	28.5	27.5	28.8	29.0
6H	28.9	30.2	29.3	30.5	30.8	27.5	28.7	27.8	29.0	29.3
8H	29.2	30.4	29.6	30.7	31.0	27.6	28.8	27.9	29.1	29.4
12H	29.4	30.6	29.8	30.9	31.2	27.6	28.7	27.9	29.1	29.4
4H 2H	26.4	27.7	26.7	28.0	28.3	25.9	27.3	26.2	27.5	27.8
3H	28.3	29.5	28.7	29.8	30.1	27.6	28.7	27.9	29.1	29.4
4H	29.2	30.3	29.6	30.7	31.0	28.2	29.3	28.6	29.6	30.0
6H	30.0	31.0	30.4	31.3	31.7	28.7	29.6	29.1	30.0	30.4
8H	30.4	31.2	30.8	31.6	32.0	28.8	29.7	29.2	30.1	30.5
12H	30.6	31.5	31.1	31.9	32.3	28.9	29.7	29.3	30.1	30.5
8H 4H	29.5	30.4	29.9	30.8	31.2	28.6	29.5	29.0	29.9	30.3
6H	30.5	31.2	30.9	31.6	32.1	29.2	30.0	29.7	30.4	30.9
8H	30.9	31.6	31.4	32.0	32.5	29.5	30.1	29.9	30.6	31.0
12H	31.3	31.9	31.8	32.4	32.9	29.6	30.1	30.1	30.6	31.1
12H 4H	29.5	30.3	29.9	30.7	31.2	28.7	29.5	29.1	29.9	30.3
6H	30.5	31.2	31.0	31.6	32.1	29.4	30.0	29.8	30.5	30.9
8H	31.0	31.6	31.5	32.0	32.5	29.6	30.2	30.1	30.7	31.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 1067 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 0.2$)
Area: 0.01 m2

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		

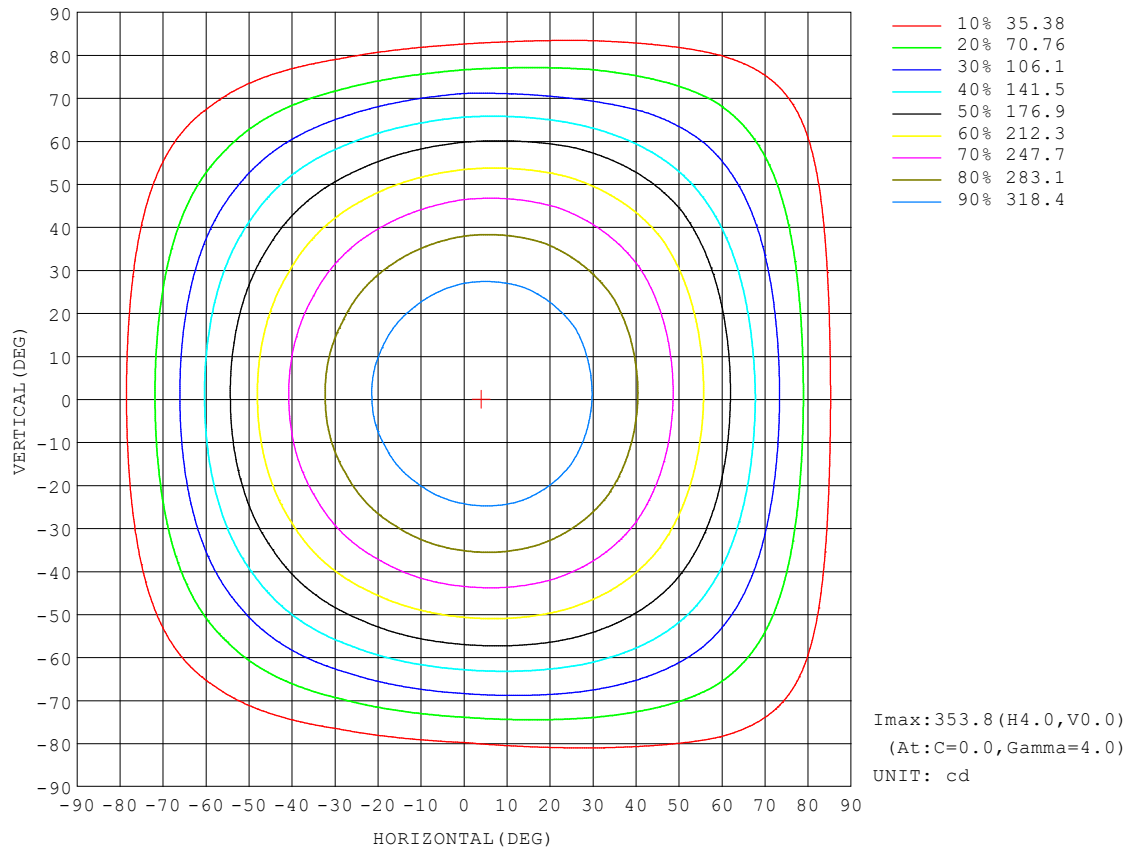
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	45	38	56	44	38	54	44	37	31
0.80	66	55	47	65	54	47	64	53	47	40
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	81	71	64	78	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	89	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	94	89	99	93	88	95	90	85	77
4.00	106	100	95	103	98	93	99	94	91	81
5.00	108	103	99	106	101	97	101	97	94	85
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		

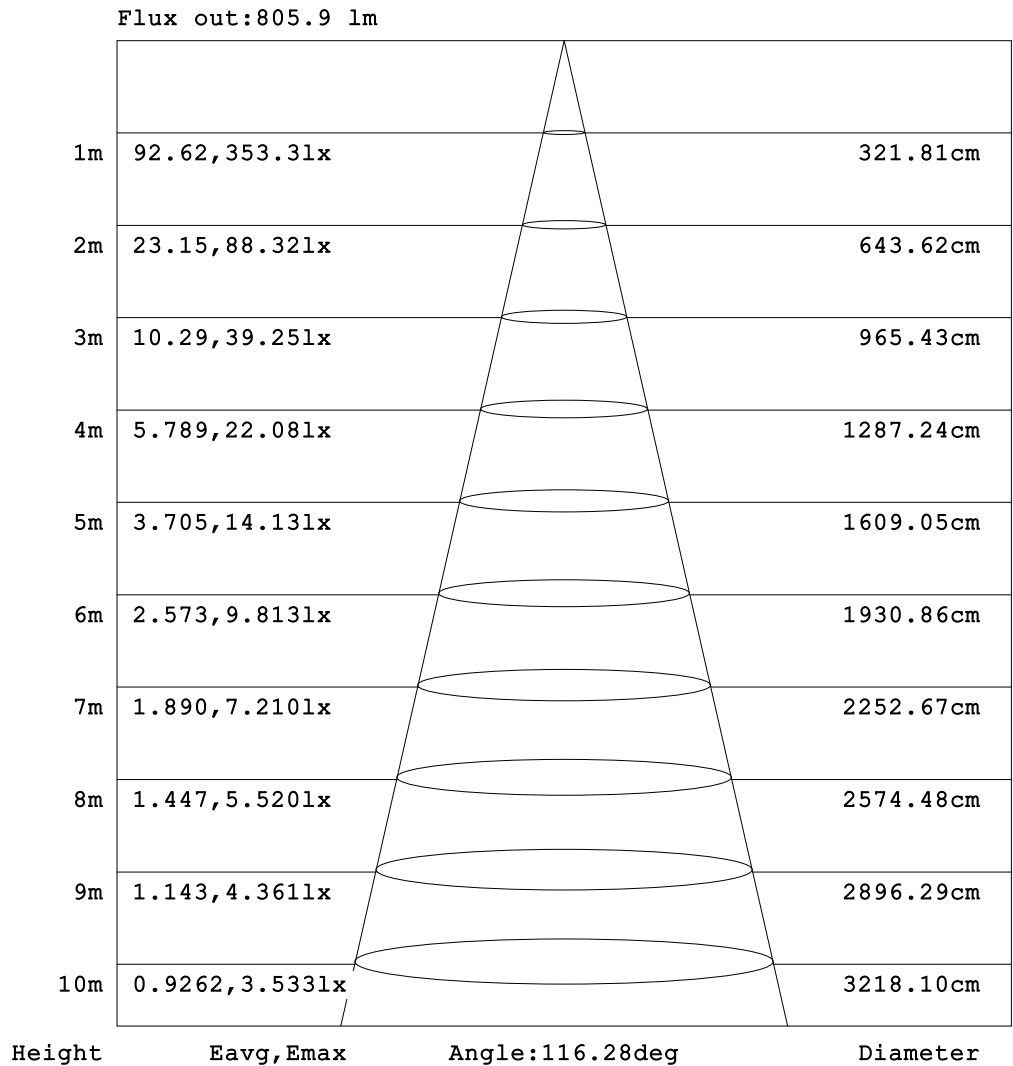


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

AAI Figure

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		



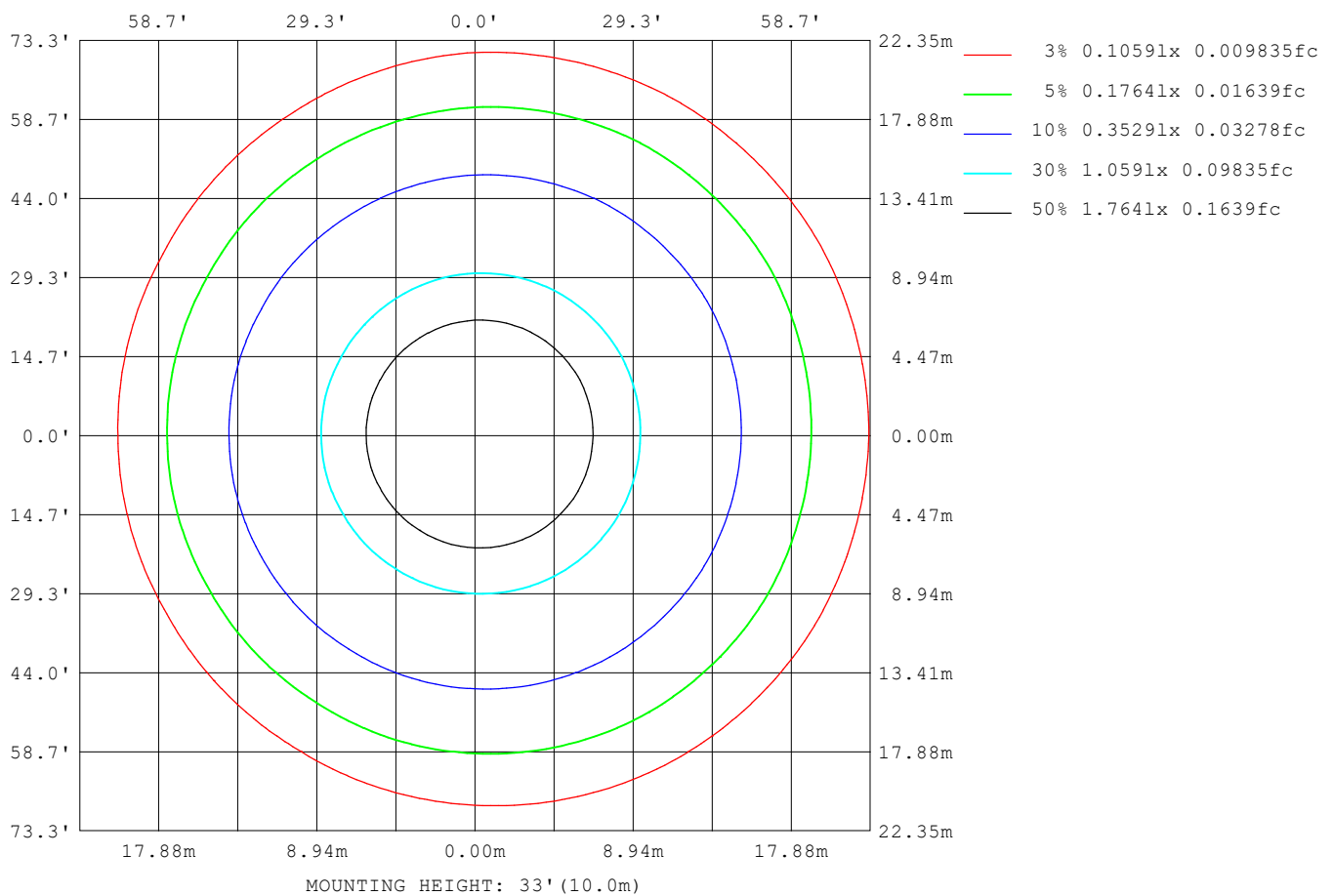
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

ISOLUX DIAGRAM

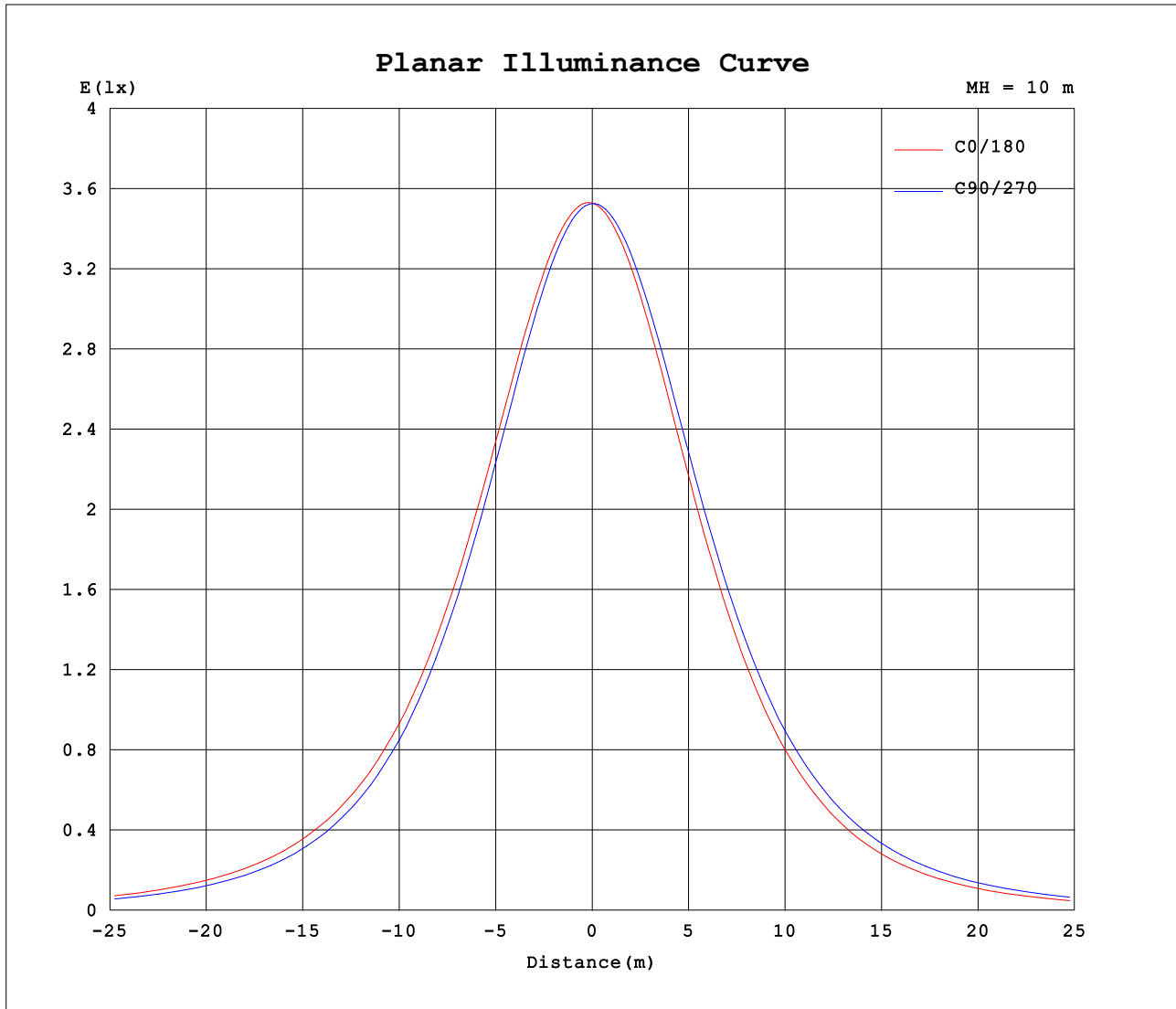
Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-01-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 8.000m [K=0.7125]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-01-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity: 65.0%
 Test Distance: 8.000m [K=0.7125]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.000V I:0.4430A P:10.600W PF:1.0000 Freq:0Hz		
Lamp Flux:1067.25x1 lm		
Name: S010120BC2PZ-混光		
MFR.:		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	353	353	353	353	352	353	353	353	353	353	352	353							
5	354	354	352	351	349	349	349	350	351	352	353	354							
10	352	351	349	346	343	342	343	344	346	349	351	352							
15	347	346	343	339	335	333	334	336	339	343	346	348							
20	340	339	335	329	324	322	322	324	329	335	339	341							
25	330	328	323	316	311	307	308	310	316	323	329	332							
30	318	315	309	301	294	291	291	294	301	310	317	319							
35	302	299	293	284	276	272	272	276	284	294	302	305							
40	285	281	274	264	255	250	251	255	264	275	284	287							
45	264	260	252	241	231	226	227	231	241	254	263	267							
50	241	236	227	216	206	201	202	206	216	231	241	245							
55	216	211	201	189	178	172	173	178	189	204	215	220							
60	188	183	172	159	148	142	144	148	160	175	188	193							
65	159	153	142	128	117	112	113	117	129	145	155	160							
70	128	122	110	95.7	85.0	80.3	81.7	86.1	98.0	113	117	120							
75	95.5	89.3	77.8	63.7	54.0	50.6	52.8	56.0	66.0	80.9	92.4	97.7							
80	63.8	58.5	47.6	34.3	27.1	25.8	28.9	30.5	37.7	50.1	60.7	65.8							
85	36.5	31.4	22.1	11.6	8.42	9.49	12.5	13.2	16.8	23.8	30.3	34.8							
90	17.2	12.6	6.52	0.68	0.70	2.43	4.13	4.92	4.58	4.90	11.7	16.7							
95	6.45	3.77	1.80	0.65	0.70	1.37	2.23	2.82	2.33	1.57	3.97	5.97							
100	1.73	1.05	0.69	0.62	0.66	1.05	1.67	1.99	1.88	1.54	1.83	1.97							
105	0.70	0.64	0.60	0.60	0.65	0.99	1.52	1.63	1.57	1.49	1.66	1.46							
110	0.63	0.60	0.58	0.59	0.61	0.94	1.47	1.51	1.47	1.47	1.62	1.40							
115	0.63	0.60	0.59	0.60	0.60	0.93	1.46	1.50	1.45	1.46	1.60	1.38							
120	0.63	0.61	0.61	0.63	0.64	0.96	1.46	1.49	1.45	1.46	1.59	1.37							
125	0.68	0.65	0.64	0.67	0.71	1.01	1.45	1.49	1.47	1.47	1.59	1.38							
130	0.71	0.68	0.67	0.70	0.77	1.05	1.44	1.49	1.47	1.48	1.60	1.39							
135	0.74	0.71	0.70	0.73	0.81	1.07	1.42	1.48	1.47	1.49	1.61	1.41							
140	0.77	0.74	0.74	0.78	0.85	1.09	1.41	1.46	1.47	1.50	1.59	1.38							
145	0.80	0.76	0.77	0.82	0.90	1.11	1.38	1.44	1.46	1.50	1.58	1.38							
150	0.83	0.80	0.81	0.86	0.96	1.14	1.36	1.41	1.44	1.49	1.56	1.38							
155	0.88	0.85	0.87	0.93	1.03	1.17	1.33	1.38	1.42	1.48	1.54	1.37							
160	0.94	0.92	0.94	1.00	1.10	1.21	1.30	1.34	1.40	1.46	1.52	1.37							
165	1.01	0.99	1.01	1.08	1.18	1.24	1.26	1.30	1.36	1.43	1.49	1.37							
170	1.09	1.06	1.09	1.15	1.24	1.26	1.22	1.26	1.32	1.40	1.46	1.38							
175	1.11	1.11	1.15	1.21	1.30	1.28	1.18	1.21	1.28	1.35	1.42	1.35							
180	1.13	1.17	1.21	1.27	1.34	1.29	1.14	1.15	1.22	1.30	1.41	1.38							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-02

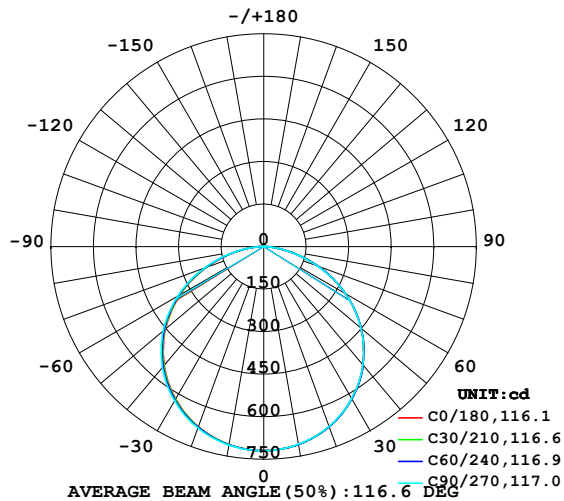
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

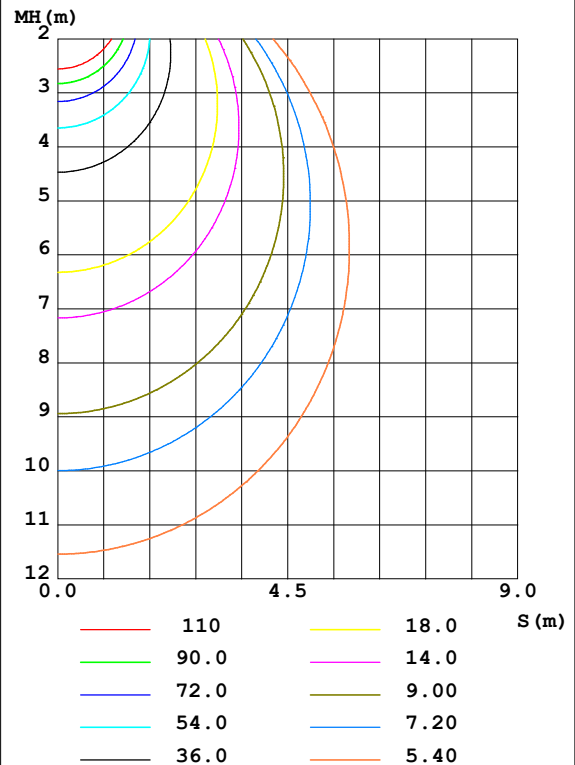
Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.29 lm/W			
MODEL		I _{max} (cd)	719.8	S/MH(C0/180)	1.28
NOMINAL POWER(W)	20.9	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	2158.8	η UP,DN(C0-180)	0.3,48.9
NOMINAL FLUX(lm)	2158.82	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.5,50.3
LAMPS INSIDE	1	η up(%)	0.8	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	η down(%)	99.2	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	708.2	708.4	707.7	706.6	708.4	708.8	710.5	710.1	0- 10	68.16	68.16	3.16,3.16
20	675.3	675.9	674.6	672.6	675.7	677.0	680.2	679.6	10- 20	196.3	264.4	12.2,12.2
30	619.9	621.2	619.6	616.9	620.9	623.8	628.3	627.2	20- 30	300.6	565.1	26.2,26.2
40	543.4	545.4	543.5	540.0	546.1	550.0	556.6	554.6	30- 40	367.6	932.7	43.2,43.2
50	446.4	448.9	447.2	444.5	453.2	456.9	463.6	460.4	40- 50	387.3	1320	61.1,61.1
60	331.6	334.3	332.8	330.7	340.9	345.6	350.5	338.2	50- 60	355.1	1675	77.6,77.6
70	203.0	206.1	202.6	204.0	216.7	219.6	223.1	212.7	60- 70	271.4	1946	90.2,90.2
80	75.38	79.01	74.96	78.11	91.27	92.35	95.36	88.45	70- 80	154.4	2101	97.3,97.3
90	4.649	4.593	1.507	5.439	11.58	11.08	5.714	8.023	80- 90	41.74	2143	99.2,99.2
100	1.410	1.393	1.395	1.842	3.485	3.363	3.169	3.156	90-100	3.617	2146	99.4,99.4
110	1.378	1.367	1.361	1.765	3.155	3.165	3.060	3.058	100-110	2.480	2149	99.5,99.5
120	1.488	1.445	1.475	1.772	3.161	3.203	3.093	3.057	110-120	2.296	2151	99.6,99.6
130	1.643	1.578	1.612	1.947	3.185	3.244	3.149	3.096	120-130	2.151	2153	99.7,99.7
140	1.729	1.687	1.739	2.110	3.139	3.214	3.168	3.100	130-140	1.914	2155	99.8,99.8
150	1.863	1.845	1.932	2.223	3.051	3.159	3.138	3.051	140-150	1.584	2157	99.9,99.9
160	2.103	2.127	2.210	2.403	2.934	3.044	3.058	2.985	150-160	1.193	2158	100,100
170	2.361	2.421	2.507	2.604	2.781	2.885	2.939	2.903	160-170	0.7518	2159	100,100
180	2.654	2.672	2.751	2.754	2.614	2.677	2.748	2.774	170-180	0.2571	2159	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1127 lm

%lum = 52.2%

%lamp = 52.2%

Conical surface Flux(120deg): 1675 lm

%lum = 77.6%

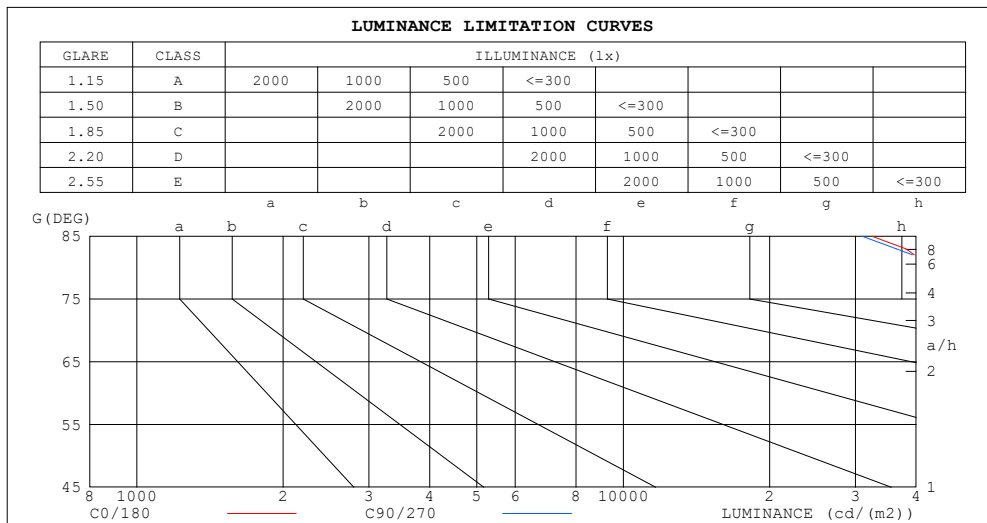
%lamp = 77.6%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	32460	30979
80	43410	43168
75	52867	52788
70	59348	59250
65	63630	63770
60	66315	66565
55	68245	68491
50	69447	69575
45	70251	70333

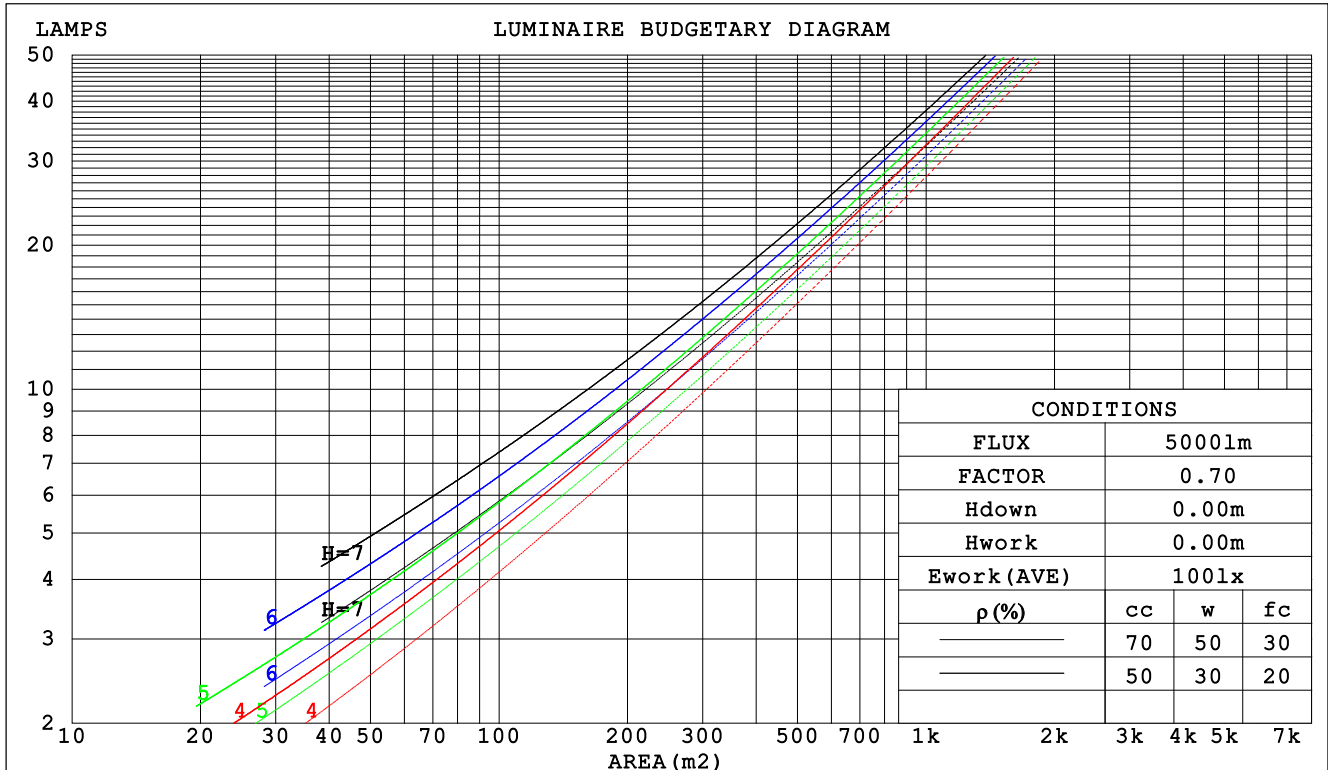
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.81	.76	.73	.78	.74	.71	.69
3.0	.79	.71	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.57
4.0	.70	.61	.54	.68	.60	.54	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.50	.44	.39	.37
7.0	.51	.42	.35	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.37	.32	.45	.37	.31	.44	.37	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

WEC AND CCEC

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.313	.178	.056	.306	.174	.055	.292	.167	.053	.279	.161	.052	.268	.155	.050		
2.0	.294	.161	.049	.288	.159	.049	.276	.153	.048	.265	.148	.046	.254	.144	.045		
3.0	.272	.145	.043	.267	.143	.043	.256	.139	.042	.246	.135	.041	.237	.131	.041		
4.0	.251	.130	.038	.246	.129	.038	.237	.125	.037	.228	.122	.037	.219	.119	.036		
5.0	.232	.118	.034	.228	.117	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033		
6.0	.215	.108	.031	.211	.107	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030		
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027		
8.0	.187	.091	.026	.184	.090	.026	.177	.089	.025	.172	.087	.025	.166	.085	.025		
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.161	.081	.023	.157	.080	.023		
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.196	.196	.196	.168	.168	.168	.114	.114	.114	.066	.066	.066	.021	.021	.021	
1.0	.186	.162	.140	.159	.139	.120	.109	.096	.083	.063	.055	.048	.020	.018	.016	
2.0	.178	.138	.104	.153	.119	.089	.105	.082	.062	.060	.048	.037	.019	.015	.012	
3.0	.171	.120	.080	.146	.104	.069	.101	.072	.049	.058	.042	.029	.019	.014	.009	
4.0	.163	.107	.064	.140	.092	.056	.096	.064	.039	.056	.038	.023	.018	.012	.008	
5.0	.156	.097	.053	.134	.084	.046	.092	.058	.032	.053	.034	.019	.017	.011	.006	
6.0	.149	.088	.045	.128	.076	.039	.088	.053	.028	.051	.031	.016	.017	.010	.005	
7.0	.142	.081	.039	.122	.071	.034	.084	.049	.024	.049	.029	.014	.016	.010	.005	
8.0	.135	.076	.035	.116	.066	.030	.081	.046	.021	.047	.027	.013	.015	.009	.004	
9.0	.129	.071	.031	.111	.061	.027	.077	.043	.019	.045	.025	.011	.015	.008	.004	
10.0	.124	.066	.028	.106	.058	.025	.074	.041	.018	.043	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz Lamp Flux:2158.82x1 lm										
Name: S012240BC2PZ 混光										
MFR.:										
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	27.5	29.1	27.8	29.3	29.5	27.5	29.1	27.8	29.3	29.5
3H	29.0	30.4	29.3	30.7	30.9	29.0	30.4	29.3	30.7	30.9
4H	29.6	30.9	29.9	31.2	31.5	29.6	30.9	29.9	31.2	31.5
6H	29.9	31.2	30.3	31.5	31.8	29.9	31.2	30.3	31.5	31.8
8H	30.0	31.2	30.4	31.5	31.8	30.0	31.2	30.4	31.5	31.8
12H	30.1	31.2	30.4	31.5	31.9	30.0	31.2	30.4	31.5	31.8
4H 2H	28.2	29.5	28.5	29.8	30.0	28.2	29.5	28.5	29.8	30.0
3H	29.8	31.0	30.2	31.3	31.6	29.8	31.0	30.2	31.3	31.6
4H	30.5	31.6	30.9	31.9	32.3	30.5	31.6	30.9	31.9	32.2
6H	31.0	31.9	31.4	32.3	32.7	30.9	31.9	31.4	32.3	32.6
8H	31.1	32.0	31.5	32.4	32.8	31.1	32.0	31.5	32.3	32.7
12H	31.2	32.0	31.6	32.4	32.8	31.1	31.9	31.6	32.3	32.8
8H 4H	30.7	31.6	31.2	32.0	32.4	30.7	31.6	31.2	32.0	32.4
6H	31.3	32.1	31.8	32.5	32.9	31.3	32.1	31.8	32.5	32.9
8H	31.5	32.2	32.0	32.6	33.1	31.5	32.2	32.0	32.6	33.1
12H	31.7	32.2	32.2	32.7	33.2	31.6	32.2	32.1	32.7	33.1
12H 4H	30.7	31.6	31.2	32.0	32.4	30.7	31.6	31.2	32.0	32.4
6H	31.4	32.0	31.8	32.5	32.9	31.4	32.0	31.8	32.5	32.9
8H	31.6	32.2	32.1	32.6	33.1	31.6	32.2	32.1	32.6	33.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 2159 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 2.7)
Area: 0.01 m2

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		

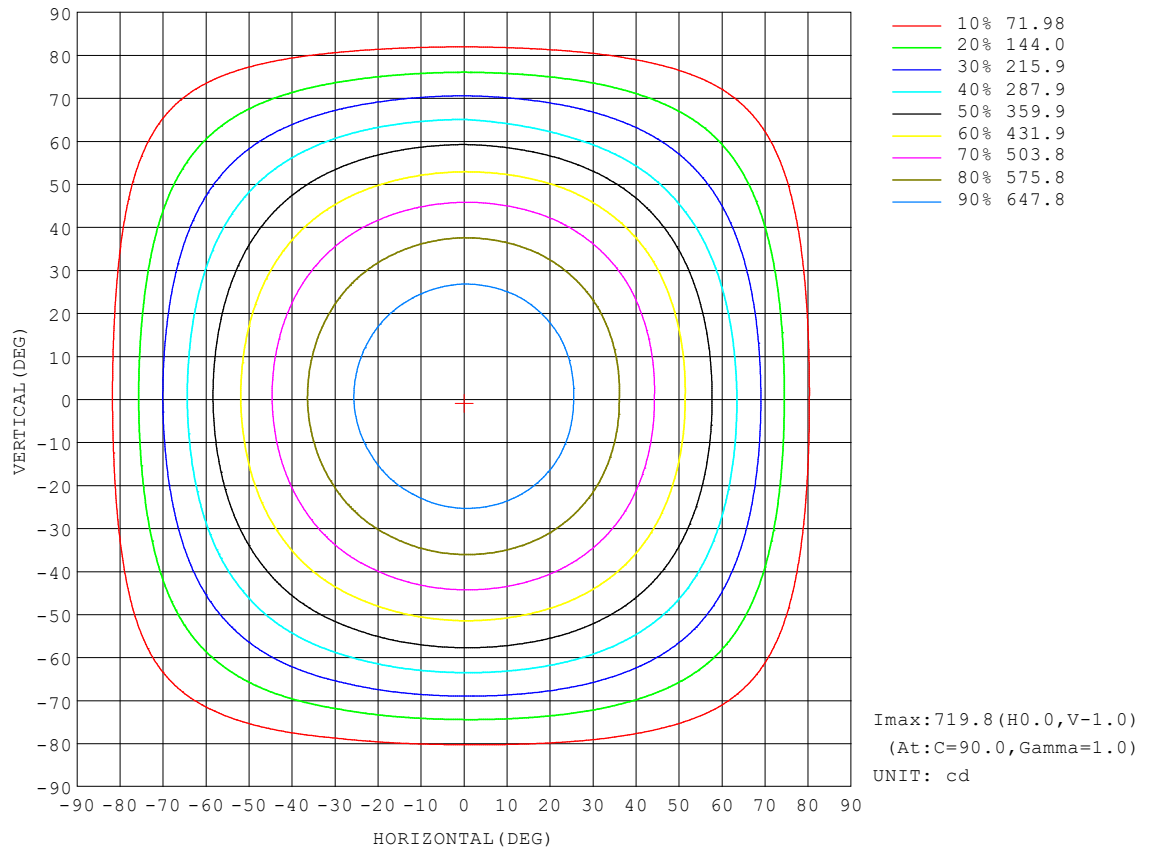
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	38	31
0.80	67	55	47	66	54	47	64	54	47	40
1.00	75	64	56	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	94	85
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		

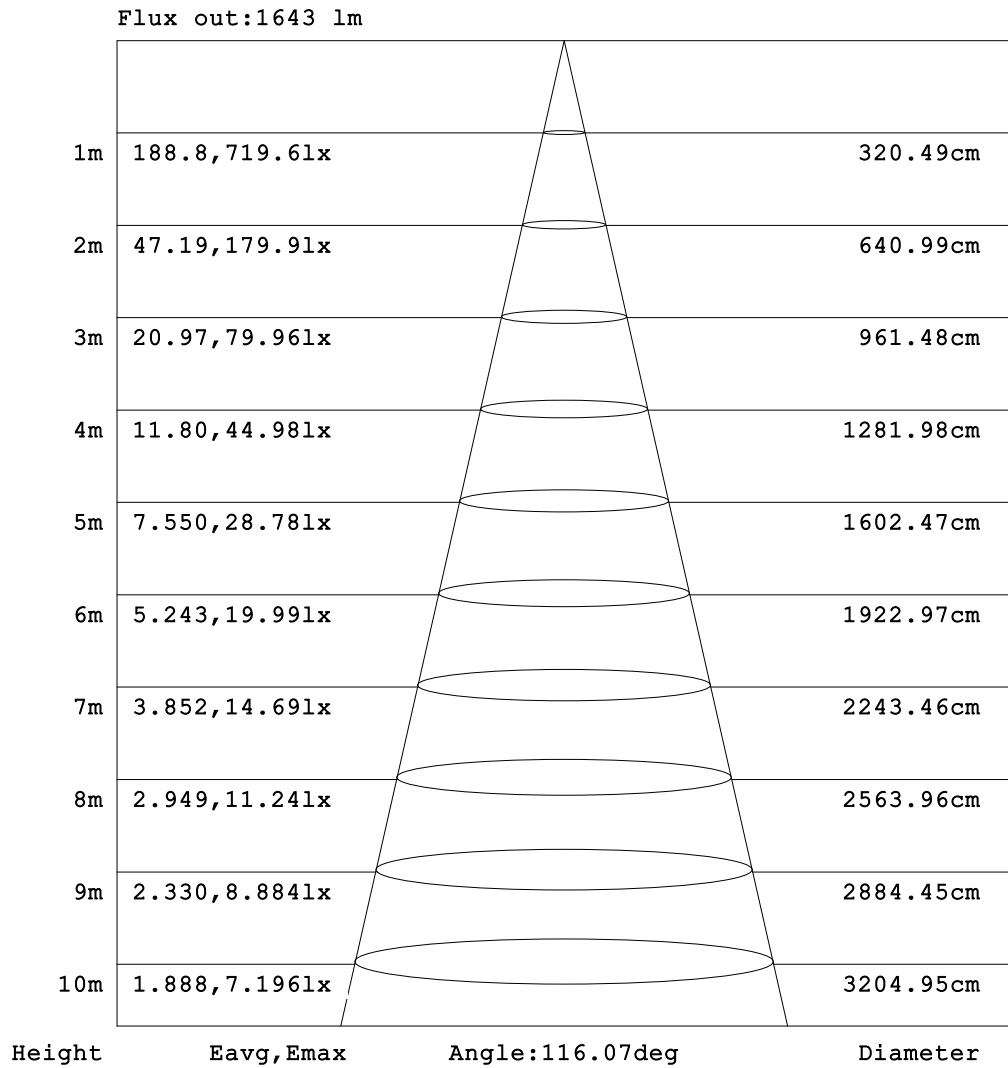


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

AAI Figure

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		



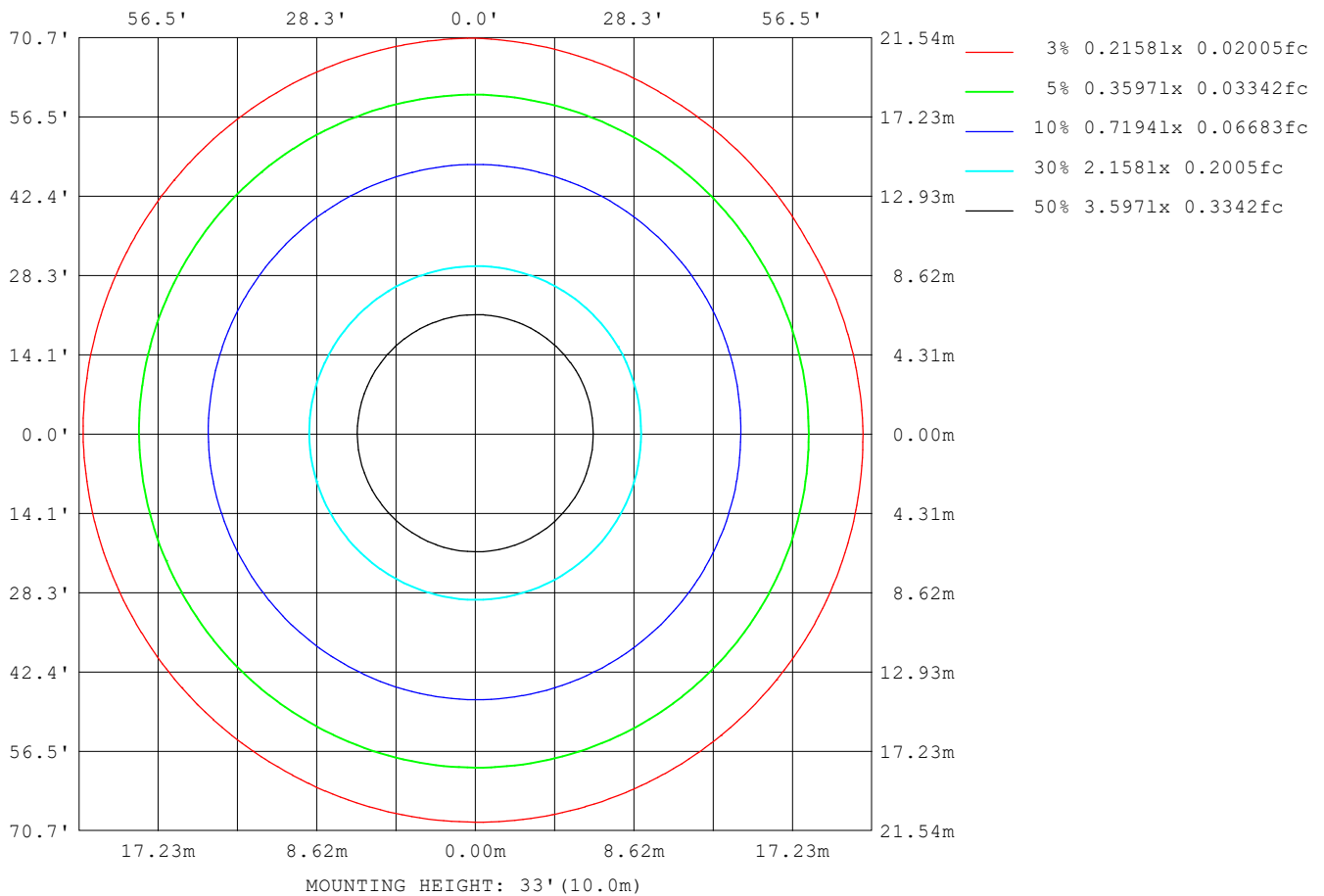
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ISOLUX DIAGRAM

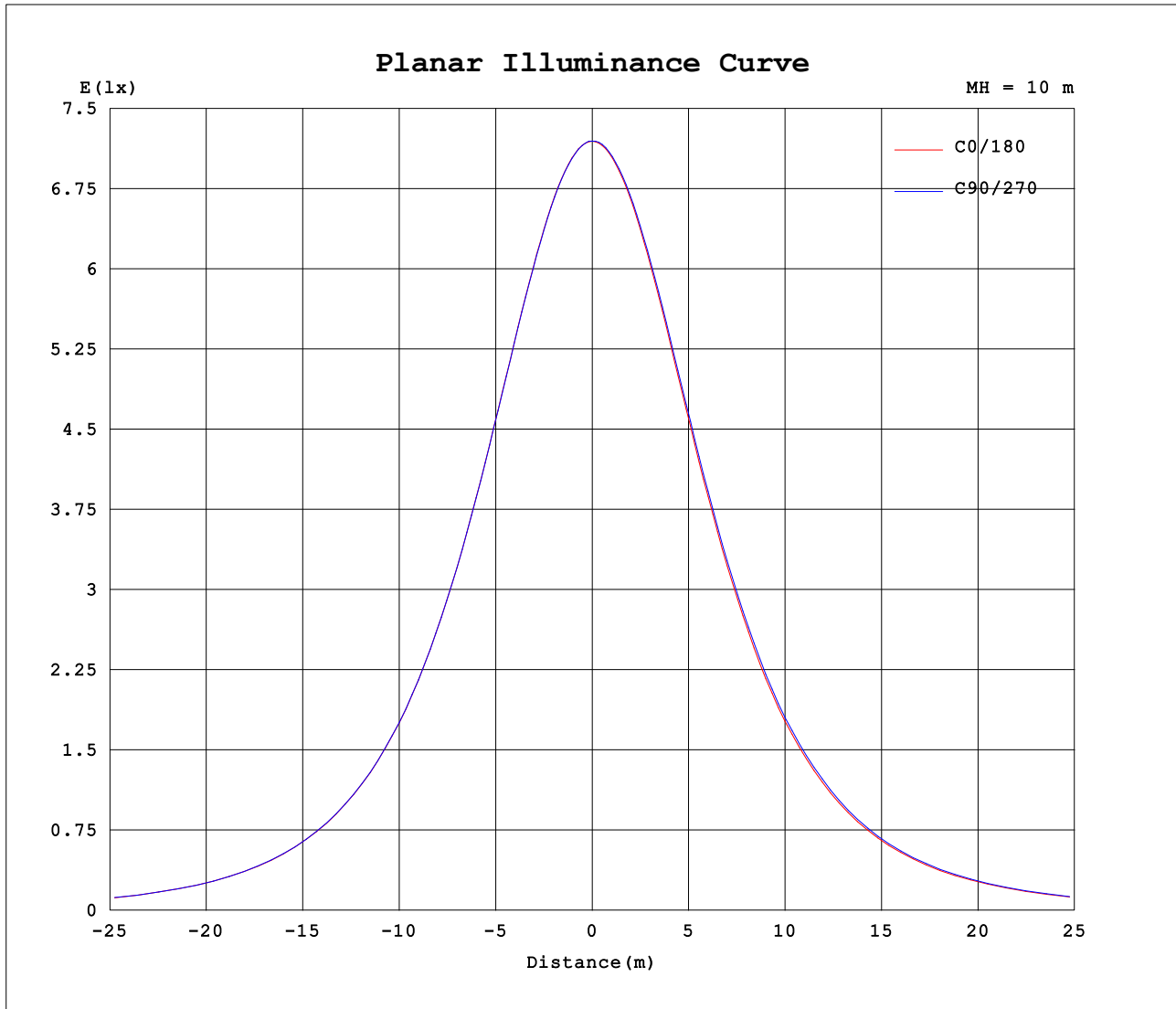
Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 8.000m [K=0.7125]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity: 65.0%
 Test Distance: 8.000m [K=0.7125]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.000V I:0.8710A P:20.900W PF:1.0000 Freq:0Hz		
Lamp Flux:2158.82x1 lm		
Name: S012240BC2PZ 混光		
MFR.:		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	719	719	719	720	719	719	719	719	719	720	719	719							
5	717	717	717	716	716	716	717	717	717	718	718	717							
10	708	708	708	708	706	707	708	708	709	711	710	710							
15	694	695	695	694	692	692	695	695	696	698	698	697							
20	675	676	676	675	672	673	676	676	678	680	680	679							
25	651	651	651	650	647	648	651	652	654	657	657	655							
30	620	621	621	620	617	617	621	622	625	628	629	626							
35	584	586	586	584	581	582	587	588	591	595	595	592							
40	543	545	545	543	540	540	546	548	552	557	557	552							
45	497	499	499	497	494	495	500	504	507	511	511	507							
50	446	449	449	447	443	446	453	455	459	464	463	458							
55	391	394	394	393	389	391	398	401	405	409	409	403							
60	332	334	334	333	329	332	341	344	347	350	342	334							
65	269	271	271	270	267	271	280	282	287	288	268	258							
70	203	206	206	203	201	207	217	218	221	223	216	209							
75	137	140	140	137	136	142	152	153	155	157	154	148							
80	75.4	79.5	78.5	75.0	74.9	81.4	91.3	91.8	92.9	95.4	91.9	85.0							
85	28.3	31.4	30.2	27.0	27.3	32.6	40.5	41.2	41.2	41.4	39.0	34.6							
90	4.65	5.40	3.79	1.51	3.43	7.45	11.6	12.4	9.73	5.71	7.79	8.25							
95	1.61	1.56	1.47	1.43	1.62	2.94	4.83	4.81	4.05	3.25	3.57	3.22							
100	1.41	1.40	1.39	1.40	1.44	2.25	3.48	3.47	3.25	3.17	3.39	2.92							
105	1.38	1.39	1.38	1.39	1.43	2.14	3.22	3.28	3.14	3.10	3.34	2.88							
110	1.38	1.38	1.36	1.36	1.42	2.11	3.16	3.22	3.11	3.06	3.28	2.83							
115	1.42	1.39	1.38	1.40	1.40	2.06	3.15	3.23	3.10	3.06	3.26	2.82							
120	1.49	1.45	1.44	1.48	1.45	2.09	3.16	3.26	3.15	3.09	3.27	2.84							
125	1.58	1.52	1.51	1.55	1.55	2.17	3.18	3.30	3.20	3.13	3.29	2.87							
130	1.64	1.58	1.57	1.61	1.65	2.25	3.19	3.29	3.20	3.15	3.30	2.89							
135	1.69	1.64	1.63	1.67	1.75	2.32	3.17	3.26	3.19	3.16	3.30	2.90							
140	1.73	1.69	1.69	1.74	1.84	2.37	3.14	3.24	3.19	3.17	3.30	2.90							
145	1.78	1.74	1.76	1.84	1.92	2.39	3.10	3.21	3.18	3.16	3.28	2.89							
150	1.86	1.83	1.86	1.93	2.01	2.43	3.05	3.17	3.15	3.14	3.23	2.87							
155	1.98	1.97	2.00	2.06	2.13	2.49	3.00	3.10	3.10	3.10	3.18	2.86							
160	2.10	2.11	2.15	2.21	2.27	2.54	2.93	3.03	3.05	3.06	3.12	2.85							
165	2.24	2.25	2.30	2.37	2.43	2.61	2.86	2.95	2.99	3.01	3.06	2.84							
170	2.36	2.40	2.45	2.51	2.56	2.65	2.78	2.86	2.91	2.94	2.99	2.82							
175	2.47	2.52	2.57	2.63	2.68	2.69	2.69	2.76	2.82	2.85	2.89	2.79							
180	2.65	2.65	2.69	2.75	2.78	2.72	2.61	2.65	2.71	2.75	2.79	2.76							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
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Operators:DAMIN
Test Date:2024-01-03

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
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Remarks: