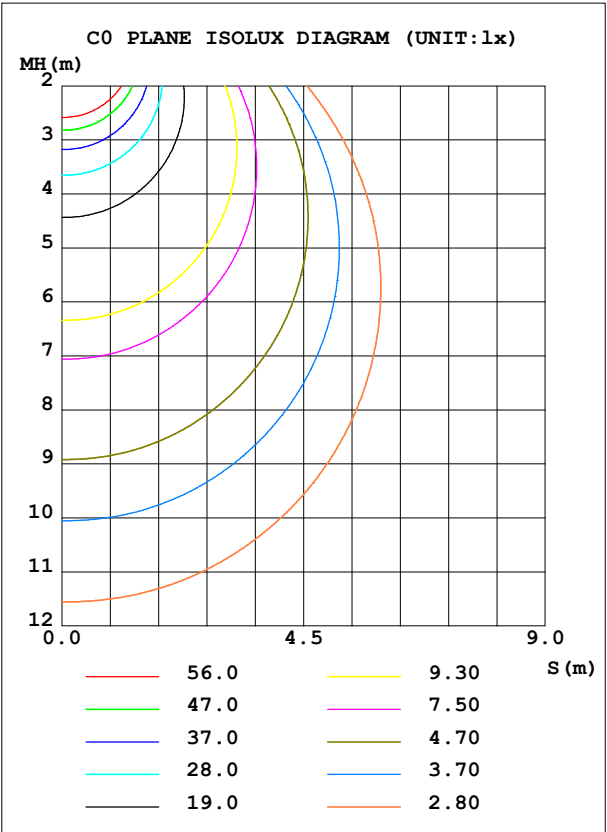
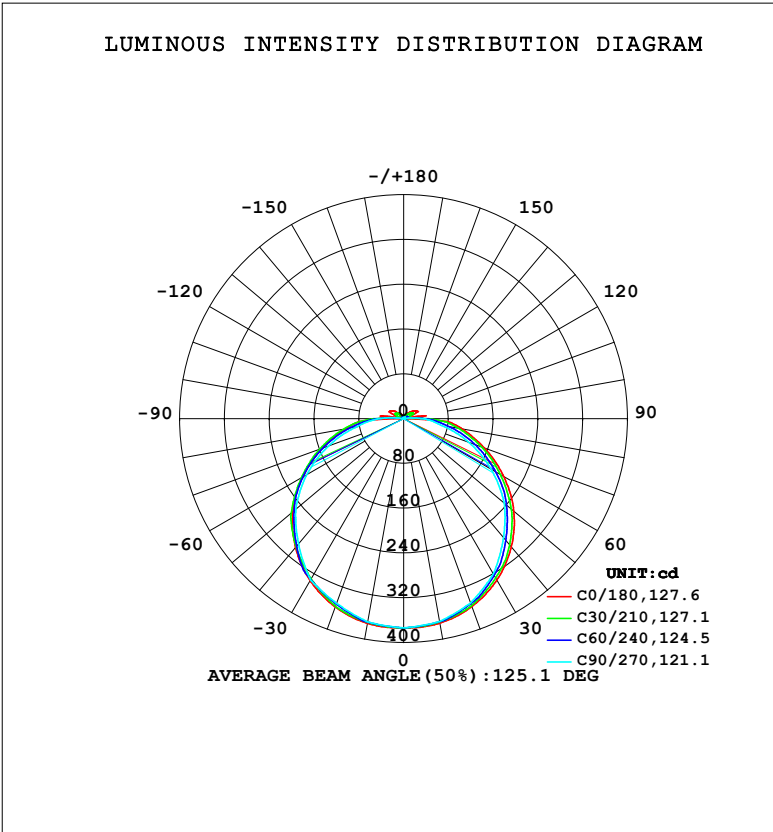


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 98.72 lm/W
MODEL	ABH14O2TW 3000K	Imax (cd)	374.0	S/MH(C0/180)	1.33	
NOMINAL POWER(W)	13.7	LOR(%)	100.0	S/MH(C90/270)	1.31	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1347.2	η UP,DN(C0-180)	2.3,46.5	
NOMINAL FLUX(lm)	1347.2	CIE CLASS	DIRECT	η UP,DN(C180-360)	2.4,48.8	
LAMPS INSIDE	1	η up (%)	4.7	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	230	η down (%)	95.3	CIBSE SHR MAX	1.50	



H(β) Range:-90 - 90DEG	V(B) Range:-180 - 180DEG
H(β) Interval: 1.0DEG	V(B) Interval: 5.0DEG
Test Speed: HIGH	
Temperature:25.3℃	Humidity:65.0%
Operators:	Test Distance:9.782m [K=1.0000]
Test Date:2023-09-04	Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	371.0	368.6	368.2	368.9	371.4	369.2	368.8	369.0	0- 10	35.43	35.43	2.63,2.63
20	357.0	352.7	350.3	353.5	357.9	353.8	350.9	353.3	10- 20	102.4	137.9	10.2,10.2
30	333.0	326.5	320.5	327.7	334.1	330.3	332.9	329.8	20- 30	158.0	295.8	22,22
40	299.3	290.8	277.6	292.5	300.5	303.1	292.4	302.2	30- 40	195.8	491.6	36.5,36.5
50	257.0	244.1	234.7	245.6	258.4	257.6	251.8	257.1	40- 50	210.8	702.4	52.1,52.1
60	206.5	197.0	180.5	198.3	208.3	211.5	200.3	211.5	50- 60	203.0	905.4	67.2,67.2
70	153.4	142.7	123.9	144.6	154.9	158.0	142.8	157.5	60- 70	173.0	1078	80,80
80	105.9	92.48	67.22	93.31	105.8	104.7	85.33	105.9	70- 80	128.0	1206	89.5,89.5
90	2.388	42.24	34.05	41.62	2.360	48.44	43.04	48.75	80- 90	77.44	1284	95.3,95.3
100	26.45	6.961	0.8746	5.823	22.45	7.412	0.7496	6.735	90-100	24.07	1308	97.1,97.1
110	5.303	11.58	1.364	11.24	10.01	9.758	1.299	10.17	100-110	5.444	1313	97.5,97.5
120	26.90	12.27	1.854	11.85	27.31	10.31	1.848	11.08	110-120	11.02	1324	98.3,98.3
130	20.73	10.09	1.926	9.620	20.67	8.733	1.865	10.73	120-130	10.68	1335	99.1,99.1
140	13.44	6.147	1.998	6.089	12.94	6.092	1.881	6.969	130-140	6.637	1342	99.6,99.6
150	6.553	2.613	2.224	2.573	6.209	2.688	2.100	2.951	140-150	3.279	1345	99.8,99.8
160	2.408	2.411	2.450	2.426	2.541	2.395	2.318	2.360	150-160	1.327	1346	99.9,99.9
170	2.436	2.434	2.443	2.421	2.540	2.473	2.429	2.462	160-170	0.6883	1347	100,100
180	2.436	2.436	2.436	2.436	2.540	2.540	2.540	2.540	170-180	0.2352	1347	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 596.49 lm

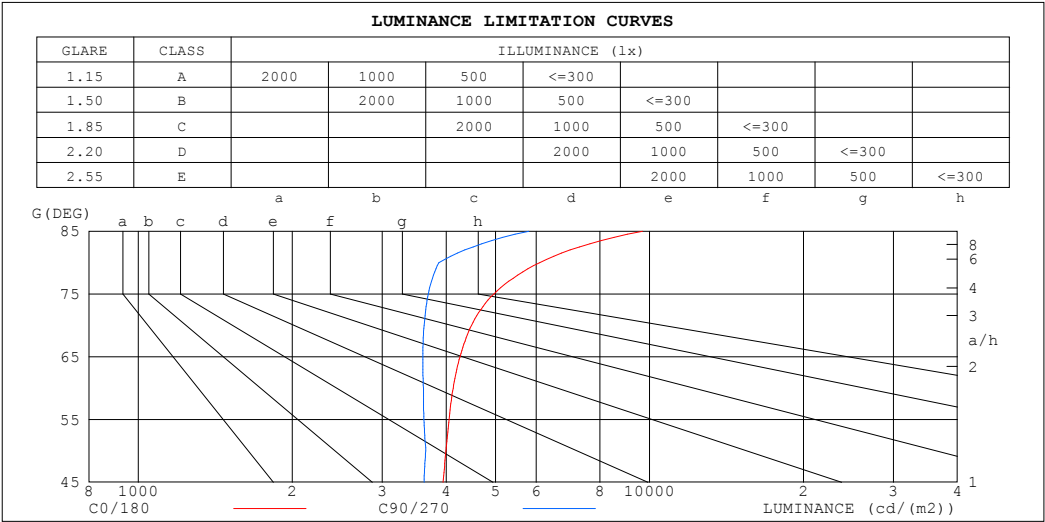
%lum = 44.3%
%lamp = 44.3%

Conical surface Flux(120deg): 905.42 lm

%lum = 67.2%
%lamp = 67.2%

LUMINANCE LIMITATION CURVES

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9693	5809
80	6098	3871
75	4958	3692
70	4485	3622
65	4258	3602
60	4130	3611
55	4056	3619
50	3998	3651
45	3947	3622

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

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	.367	.209	.066	.358	.204	.065	.342	.196	.063	.327	.189	.061	.313	.182	.059		
2.0	.326	.179	.055	.318	.175	.054	.304	.169	.052	.291	.163	.051	.278	.157	.050		
3.0	.293	.156	.047	.286	.153	.046	.274	.148	.045	.262	.143	.044	.250	.139	.043		
4.0	.266	.138	.041	.260	.136	.040	.248	.132	.039	.238	.128	.038	.228	.124	.038		
5.0	.243	.124	.036	.237	.122	.036	.227	.118	.035	.217	.115	.034	.208	.111	.033		
6.0	.223	.112	.032	.218	.110	.032	.209	.107	.031	.200	.104	.031	.192	.101	.030		
7.0	.206	.102	.029	.202	.101	.029	.194	.098	.028	.186	.095	.028	.178	.093	.027		
8.0	.192	.094	.026	.188	.092	.026	.180	.090	.026	.173	.088	.025	.166	.085	.025		
9.0	.179	.087	.024	.175	.085	.024	.168	.083	.024	.162	.081	.023	.156	.079	.023		
10.0	.168	.080	.022	.164	.079	.022	.158	.077	.022	.152	.076	.021	.147	.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	.226	.226	.226	.193	.193	.193	.132	.132	.132	.076	.076	.076	.024	.024	.024	
1.0	.220	.192	.166	.189	.165	.143	.129	.113	.099	.074	.066	.057	.024	.021	.019	
2.0	.213	.168	.130	.183	.145	.113	.125	.100	.079	.072	.058	.046	.023	.019	.015	
3.0	.206	.151	.108	.176	.130	.093	.121	.091	.065	.070	.053	.039	.022	.017	.013	
4.0	.198	.138	.093	.170	.119	.080	.117	.083	.057	.067	.049	.033	.022	.016	.011	
5.0	.190	.128	.082	.163	.111	.071	.112	.077	.050	.065	.045	.030	.021	.015	.010	
6.0	.182	.120	.075	.157	.104	.065	.108	.073	.046	.063	.043	.027	.020	.014	.009	
7.0	.175	.113	.069	.151	.098	.060	.104	.069	.043	.061	.040	.025	.020	.013	.008	
8.0	.169	.107	.065	.145	.093	.057	.100	.065	.040	.058	.039	.024	.019	.013	.008	
9.0	.162	.102	.062	.140	.089	.054	.097	.062	.038	.056	.037	.023	.018	.012	.008	
10.0	.156	.098	.059	.135	.085	.052	.093	.060	.037	.055	.035	.022	.018	.012	.007	

H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2023-09-04

V(B) Range:-180 - 180DEG
 V(B) Interval: 5.0DEG
 Humidity:65.0%
 Test Distance:9.782m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME: ABH14O2TW 3000K					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.:					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					16.4	17.9	16.7	18.2	18.5	15.8	17.4	16.2	17.7	18.0
3H					18.4	19.9	18.8	20.2	20.5	17.6	19.0	18.0	19.4	19.7
4H					19.5	20.8	19.9	21.2	21.5	18.4	19.8	18.8	20.1	20.5
6H					20.6	21.9	21.0	22.2	22.6	19.1	20.4	19.5	20.8	21.2
8H					21.1	22.4	21.6	22.8	23.2	19.5	20.7	19.9	21.1	21.5
12H					21.8	23.0	22.2	23.4	23.8	19.9	21.1	20.3	21.4	21.9
4H 2H					17.1	18.4	17.4	18.8	19.1	16.6	18.0	17.0	18.3	18.7
3H					19.3	20.5	19.7	20.9	21.3	18.6	19.8	19.1	20.2	20.6
4H					20.5	21.6	21.0	22.0	22.5	19.6	20.7	20.0	21.1	21.6
6H					21.8	22.8	22.3	23.2	23.7	20.5	21.5	20.9	21.9	22.4
8H					22.5	23.4	23.0	23.9	24.4	20.9	21.8	21.4	22.3	22.8
12H					23.3	24.1	23.8	24.6	25.1	21.4	22.2	21.9	22.7	23.2
8H 4H					20.9	21.8	21.4	22.3	22.8	20.1	21.1	20.6	21.5	22.0
6H					22.5	23.2	23.0	23.7	24.3	21.3	22.0	21.8	22.5	23.1
8H					23.3	24.0	23.9	24.5	25.1	21.8	22.5	22.4	23.1	23.6
12H					24.3	25.0	24.9	25.5	26.1	22.5	23.1	23.1	23.6	24.2
12H 4H					21.0	21.8	21.5	22.3	22.8	20.3	21.1	20.8	21.6	22.1
6H					22.6	23.3	23.1	23.8	24.4	21.5	22.2	22.0	22.7	23.3
8H					23.6	24.2	24.1	24.7	25.3	22.2	22.8	22.7	23.3	23.9
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H					+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H					+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H					+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 1347 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.0)
Area: 0.1 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

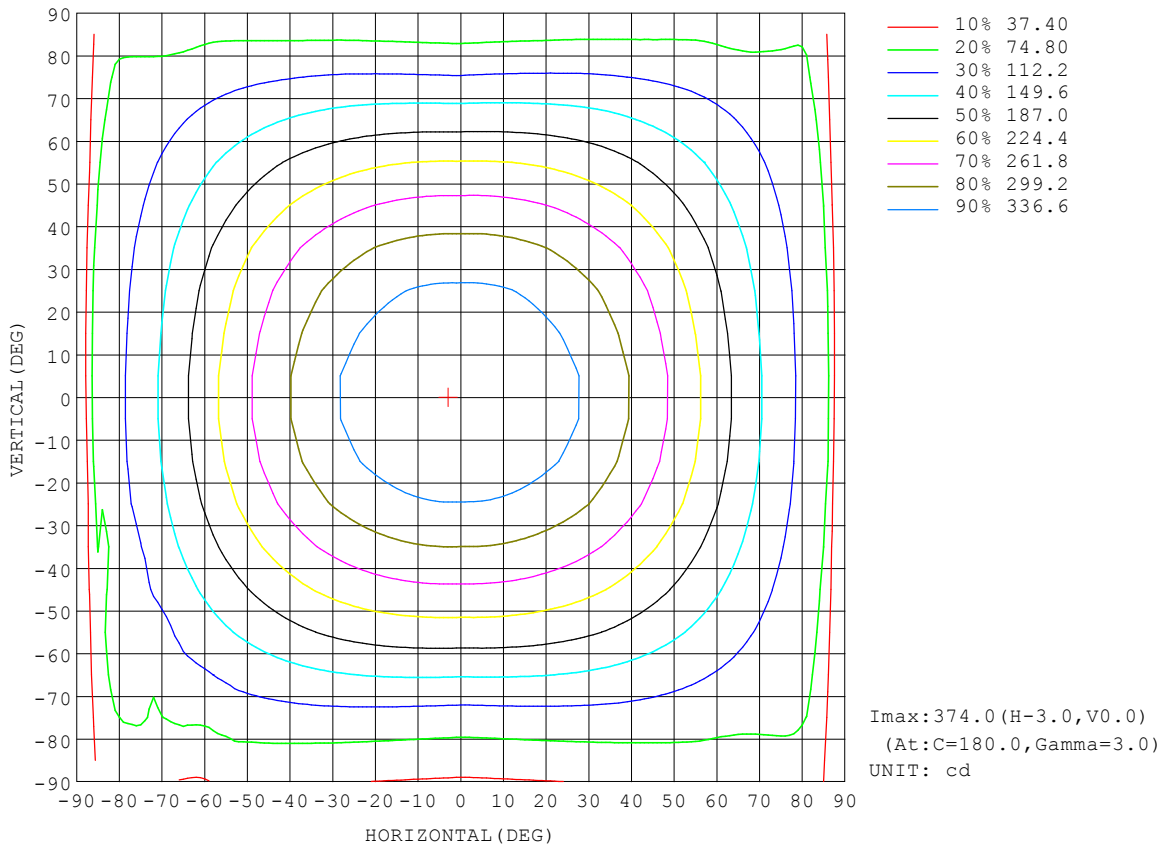
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	33	52	40	33	51	40	33	26
0.80	62	50	42	61	49	42	59	48	41	34
1.00	71	58	50	69	58	50	66	59	49	41
1.25	78	66	58	76	65	57	73	63	56	48
1.50	83	71	64	81	70	63	77	68	62	53
2.00	90	80	72	88	78	71	83	76	70	60
2.50	94	85	78	92	83	77	87	80	74	65
3.00	98	89	83	95	88	82	90	84	79	69
4.00	102	95	89	99	93	88	94	89	85	74
5.00	105	99	94	102	97	92	97	92	88	77
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2023-09-04

$V(B)$ Range:-180 - 180DEG
 $V(B)$ Interval: 5.0DEG
 Humidity:65.0%
 Test Distance:9.782m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

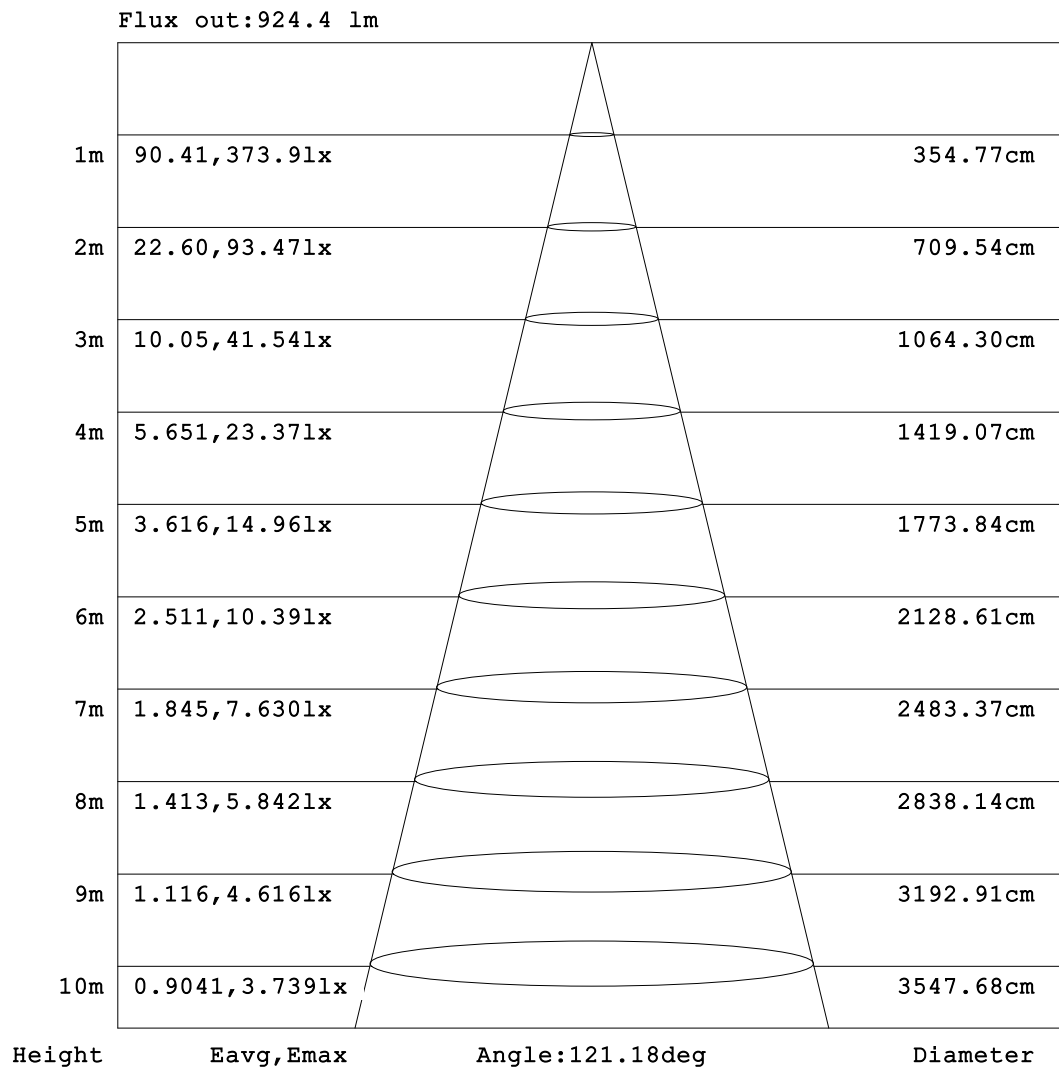
NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



H(β) Range:-90 - 90DEG H(β) Interval: 1.0DEG Test Speed: HIGH Temperature:25.3℃ Operators: Test Date:2023-09-04	V(B) Range:-180 - 180DEG V(B) Interval: 5.0DEG Humidity:65.0% Test Distance:9.782m [K=1.0000] Remarks:
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AAI Figure

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

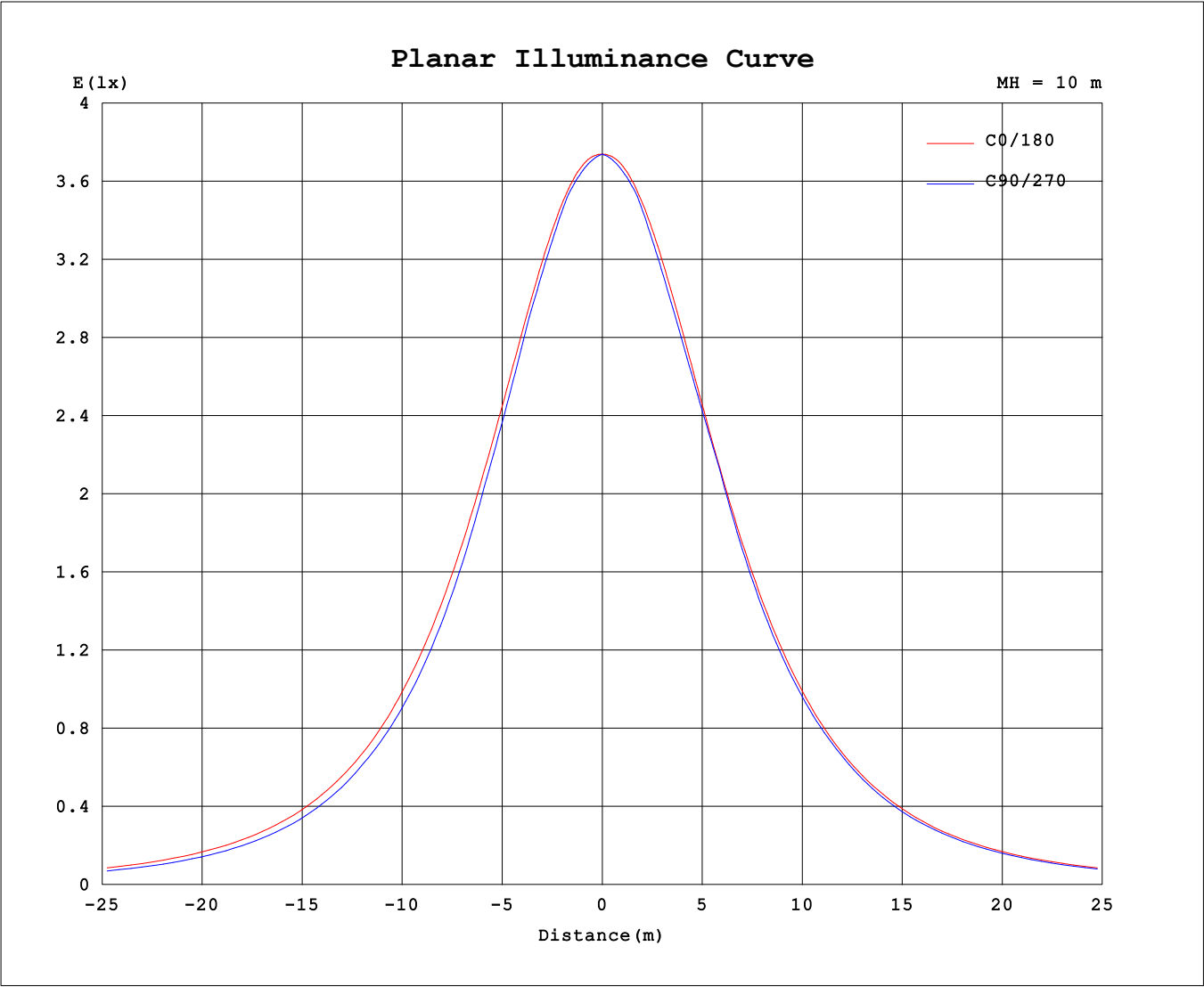


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1																	UNIT: cd		
<div>C (DEG) γ (DEG)</div>	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374
5	374	373	373	373	373	373	372	372	372	372	372	372	371	371	371	371	371	371	371
10	371	371	370	370	369	369	369	369	369	369	369	368	368	368	368	368	368	368	368
15	365	365	364	364	363	363	363	363	364	363	362	362	361	361	360	360	360	359	359
20	357	356	355	355	355	355	355	354	353	353	352	352	352	351	351	351	351	350	350
25	346	345	344	344	344	344	343	342	341	341	341	340	339	338	337	337	336	336	335
30	333	332	331	331	331	330	329	329	328	327	325	324	323	323	322	322	321	321	321
35	317	316	315	316	314	314	314	312	311	309	308	308	306	304	303	301	300	299	299
40	299	298	298	297	296	296	294	293	292	291	288	286	284	282	281	280	279	278	278
45	279	278	278	277	276	275	274	273	270	267	265	264	262	260	259	258	257	257	256
50	257	256	255	255	254	252	251	248	246	244	243	241	240	239	238	237	236	235	235
55	233	231	231	231	229	228	225	223	222	221	220	219	217	215	213	211	209	208	208
60	206	205	205	204	204	201	199	199	198	197	195	192	190	188	186	184	182	181	181
65	180	179	179	178	176	175	174	174	172	169	167	165	163	161	158	156	154	153	152
70	153	152	152	151	150	150	148	146	144	143	141	138	136	133	131	128	126	125	124
75	128	128	127	126	125	124	122	121	119	117	115	112	109	106	103	100	98.2	96.4	95.5
80	106	105	104	104	102	101	99.5	97.5	95.2	92.5	89.5	86.1	82.5	78.9	75.7	72.7	70.1	68.2	67.2
85	84.5	84.2	84.4	83.6	82.2	80.2	77.6	74.0	70.8	67.7	64.8	62.2	59.8	57.6	55.7	54.0	52.5	51.3	50.6
90	2.39	37.4	67.0	62.7	49.2	39.0	40.7	45.6	44.2	42.2	40.5	39.1	38.3	37.5	36.7	35.9	35.1	34.5	34.0
95	4.03	11.2	29.9	44.5	20.2	1.57	4.71	17.1	17.4	16.6	16.1	16.0	16.7	17.3	17.6	17.8	17.7	17.6	17.5
100	26.5	27.1	28.1	28.5	18.0	4.23	4.46	8.88	8.68	6.96	4.14	2.15	1.49	1.21	1.04	0.95	0.91	0.94	0.87
105	1.60	1.87	4.25	6.08	7.73	3.15	2.56	5.85	8.78	9.26	6.77	4.78	3.69	2.89	2.26	1.80	1.62	1.51	1.12
110	5.30	5.10	7.11	5.96	7.78	9.85	8.04	7.96	10.9	11.6	9.25	7.21	5.70	4.42	3.40	2.60	2.32	2.05	1.36
115	23.0	22.2	24.2	20.0	18.7	19.7	15.1	13.6	13.9	12.6	11.0	9.35	7.43	5.73	4.40	3.33	3.01	2.57	1.61
120	26.9	26.9	26.5	24.7	23.0	21.0	18.9	16.0	14.2	12.3	10.5	8.77	7.33	5.89	4.73	3.77	3.62	3.05	1.85
125	24.3	24.3	23.8	22.9	21.2	19.4	17.5	15.6	13.4	11.4	9.51	7.76	6.34	4.96	3.84	3.22	3.21	2.73	1.89
130	20.7	20.7	20.3	19.6	18.5	16.9	15.3	13.6	11.8	10.1	8.10	6.61	5.15	3.83	3.06	2.76	2.79	2.45	1.93
135	17.1	17.1	16.8	16.2	15.3	14.1	12.7	11.2	9.71	8.08	6.52	5.22	3.92	2.64	2.40	2.33	2.37	2.20	1.96
140	13.4	13.5	13.2	12.7	11.9	11.0	9.88	8.72	7.48	6.15	4.99	3.79	2.78	2.20	2.09	2.02	2.01	2.00	2.00
145	9.67	9.72	9.56	9.20	8.68	8.06	7.26	6.26	5.27	4.27	3.31	2.74	2.29	2.20	2.15	2.12	2.12	2.11	2.11
150	6.55	6.60	6.50	6.24	5.82	5.27	4.62	3.89	3.09	2.61	2.49	2.35	2.30	2.27	2.24	2.23	2.22	2.22	2.22
155	3.70	3.73	3.67	3.50	3.23	2.87	2.56	2.42	2.40	2.40	2.40	2.39	2.38	2.36	2.34	2.34	2.34	2.33	2.34
160	2.41	2.41	2.41	2.40	2.40	2.41	2.41	2.41	2.41	2.41	2.42	2.43	2.42	2.42	2.43	2.43	2.44	2.44	2.45
165	2.44	2.43	2.43	2.43	2.43	2.43	2.43	2.44	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.44	2.44	2.44	2.45
170	2.44	2.44	2.44	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.44	2.44	2.43	2.44	2.44	2.44	2.44	2.44	2.44
175	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44
180	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG

Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--2																UNIT: cd				
C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	
0	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	
5	371	371	371	371	371	371	372	372	372	372	372	372	373	373	373	373	374	374	374	
10	368	368	368	369	369	369	369	369	369	369	369	369	370	370	370	370	371	371	371	
15	359	360	360	360	361	362	362	363	364	364	364	364	364	364	364	365	365	366	365	
20	350	351	351	351	352	352	352	353	354	354	355	356	356	356	356	356	357	358	357	
25	336	336	337	338	339	340	341	342	342	343	343	344	345	346	346	346	346	347	346	
30	321	322	322	323	324	324	325	326	328	329	330	330	331	333	333	333	333	334	333	
35	300	301	302	303	305	307	309	310	311	312	314	315	315	316	318	317	317	319	317	
40	278	279	280	282	283	285	287	290	292	294	295	296	298	298	299	300	299	301	300	
45	257	258	259	260	261	263	265	267	269	272	275	275	277	278	278	280	279	280	280	
50	235	236	237	238	240	241	242	244	246	248	250	253	254	255	256	258	258	258	258	
55	208	210	211	213	216	218	220	221	222	223	225	227	230	231	233	233	234	235	234	
60	181	183	185	187	189	191	193	196	198	200	200	201	203	206	207	207	208	208	208	
65	153	155	157	159	162	164	167	169	171	173	175	176	177	178	180	181	182	182	182	
70	125	127	129	132	134	137	140	142	145	146	148	150	151	151	153	154	155	155	155	
75	96.8	98.7	101	104	107	110	113	116	119	121	123	124	126	126	127	128	129	129	129	
80	68.5	70.7	73.4	76.4	79.9	83.5	86.9	90.3	93.3	96.1	96.9	95.3	98.3	94.3	91.6	89.9	105	106	107	
85	51.6	53.0	54.6	56.3	58.4	60.6	62.7	65.1	67.9	70.4	70.1	66.7	73.1	74.5	76.8	83.2	74.6	84.2	85.5	
90	34.7	35.5	36.3	37.1	37.9	38.8	39.3	40.3	41.6	41.0	41.2	35.4	35.5	45.4	60.7	66.3	40.3	2.36	43.3	
95	17.8	17.9	18.0	17.8	17.5	16.9	15.9	15.4	15.2	11.5	12.8	5.09	1.39	17.8	41.9	35.8	17.8	9.56	25.0	
100	1.04	1.00	0.96	1.05	1.22	1.50	1.97	3.37	5.82	4.68	6.33	4.41	2.84	15.1	25.9	24.3	23.3	22.5	23.9	
105	1.22	1.57	1.89	2.33	2.92	3.69	4.68	6.26	8.59	8.19	5.91	2.44	3.25	6.98	5.53	2.64	1.87	1.87	1.89	
110	1.39	2.09	2.76	3.52	4.50	5.69	7.15	8.99	11.2	12.6	9.72	8.55	11.8	10.5	8.41	9.86	8.37	10.0	8.28	
115	1.54	2.54	3.56	4.60	5.89	7.43	9.29	10.8	12.3	14.0	14.2	15.2	19.4	21.5	21.4	27.0	25.8	28.4	25.9	
120	1.67	2.84	4.03	4.96	6.07	7.34	8.71	10.2	11.9	13.7	15.7	17.9	20.2	22.3	24.3	25.8	26.2	27.3	26.8	
125	1.70	2.52	3.35	4.00	5.00	6.29	7.72	9.26	11.0	12.8	14.8	16.6	18.5	20.4	22.2	22.9	23.3	24.2	23.9	
130	1.77	2.25	2.74	3.15	3.81	5.06	6.48	7.99	9.62	11.3	12.9	14.6	16.3	17.9	19.1	19.7	20.0	20.7	20.4	
135	1.86	2.07	2.26	2.42	2.61	3.67	5.01	6.47	7.92	9.40	10.8	12.2	13.6	14.8	15.6	16.1	16.4	5.35	8.68	
140	1.97	1.98	2.00	2.05	2.16	2.67	3.60	4.83	6.09	7.34	8.57	9.72	10.7	11.5	12.1	12.6	12.7	12.9	13.1	
145	2.07	2.08	2.10	2.12	2.19	2.28	2.67	3.20	4.18	5.18	6.15	7.09	7.88	8.50	8.93	9.20	9.28	9.45	9.48	
150	2.18	2.19	2.20	2.22	2.24	2.31	2.35	2.48	2.57	3.08	3.83	4.50	5.08	5.55	5.90	6.11	6.16	6.21	6.16	
155	2.29	2.29	2.30	2.32	2.34	2.35	2.41	2.42	2.42	2.42	2.43	2.55	2.80	3.05	3.26	3.38	3.41	3.40	3.50	
160	2.40	2.40	2.40	2.40	2.40	2.40	2.41	2.40	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.44	2.54	2.54	
165	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.42	2.42	2.42	2.42	2.43	2.43	2.43	2.44	2.44	2.54	2.53	
170	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.43	2.43	2.43	2.43	2.43	2.43	2.54	2.53	
175	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.44	2.54	2.54	
180	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.54	2.54	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG

Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--3																UNIT: cd				
C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	
0	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	
5	373	373	373	373	373	372	372	372	372	372	372	372	372	371	371	371	371	371	371	
10	371	370	370	370	370	369	369	369	369	369	369	369	369	369	369	369	369	369	369	
15	365	364	364	364	364	364	365	364	363	363	362	361	361	361	360	360	360	360	360	
20	356	356	356	356	357	355	355	354	353	353	352	352	352	352	351	351	351	351	351	
25	346	346	346	346	344	343	343	342	342	342	342	342	342	342	342	342	342	342	342	
30	333	333	333	331	330	330	330	330	331	331	332	333	333	333	333	333	333	333	333	
35	317	318	316	315	315	316	317	318	319	320	319	317	316	315	314	313	313	313	314	
40	300	299	298	298	299	300	302	303	301	299	298	296	295	294	294	293	292	293	294	
45	280	279	278	279	282	284	282	280	279	278	277	276	275	274	273	272	272	273	273	
50	258	257	258	260	262	260	259	258	257	256	255	255	254	253	253	252	252	252	253	
55	234	234	236	239	237	235	235	235	235	235	233	232	230	229	228	227	226	227	228	
60	207	209	213	211	211	211	211	212	210	209	208	206	205	203	202	201	200	201	202	
65	181	185	185	185	185	186	186	185	184	183	181	179	177	175	173	172	172	173	174	
70	156	158	158	159	160	159	159	158	157	155	153	151	149	147	145	143	143	144	145	
75	132	132	133	134	134	133	132	131	129	128	126	123	121	118	116	115	114	115	117	
80	108	109	109	109	109	108	107	105	103	100	98.2	95.5	92.7	90.1	87.9	86.1	85.3	86.7	88.8	
85	86.9	87.3	87.1	86.5	85.3	82.8	80.2	77.5	75.1	73.3	71.9	70.3	68.7	67.1	65.8	64.7	64.2	65.1	66.5	
90	67.1	54.6	42.3	42.3	50.4	52.4	50.4	48.4	46.8	46.0	45.9	45.6	45.1	44.5	43.9	43.3	43.0	43.6	44.4	
95	46.5	31.9	6.35	3.06	16.4	21.8	20.4	19.2	18.4	18.7	19.9	20.9	21.5	21.9	22.0	22.0	21.9	22.1	22.3	
100	23.4	24.4	12.8	4.30	10.2	11.7	10.3	7.41	3.97	1.84	1.20	0.98	0.89	0.84	0.82	0.81	0.75	0.75	0.84	
105	2.31	5.13	6.31	2.91	3.22	7.52	9.58	8.49	5.79	3.74	2.48	1.81	1.55	1.31	1.10	1.07	1.02	1.09	1.19	
110	9.34	8.49	10.4	11.6	8.46	8.67	10.6	9.76	7.53	5.38	3.45	2.59	2.07	1.74	1.39	1.32	1.30	1.43	1.53	
115	26.3	21.3	21.5	19.2	15.0	13.2	12.5	10.5	8.70	6.62	4.11	3.25	2.15	2.12	1.68	1.56	1.57	1.77	1.85	
120	26.0	24.3	22.2	20.2	17.8	15.0	12.5	10.3	8.35	6.32	4.25	3.51	2.50	2.34	1.95	1.78	1.85	2.11	2.11	
125	23.2	22.1	20.3	18.4	16.5	14.2	11.8	9.66	7.75	5.90	3.34	3.34	2.59	2.13	1.94	1.78	1.86	2.05	2.05	
130	19.8	18.6	17.8	16.2	14.4	12.4	10.5	8.73	7.15	5.29	3.61	2.88	2.37	1.99	1.92	1.81	1.86	1.99	1.99	
135	12.0	15.0	15.1	13.8	12.1	10.4	7.34	7.23	6.27	2.52	3.41	2.30	2.11	1.92	1.90	1.84	1.87	1.94	1.93	
140	12.9	12.5	11.9	10.9	7.87	4.97	6.90	6.09	3.44	3.55	2.59	2.15	2.01	1.92	1.89	1.88	1.88	1.88	1.89	
145	9.04	7.81	5.64	4.61	6.39	6.41	5.30	3.54	3.26	2.62	2.25	2.15	2.07	2.02	2.00	2.00	1.99	1.99	2.00	
150	6.10	6.08	5.77	5.33	4.75	4.07	3.30	2.69	2.43	2.29	2.24	2.19	2.16	2.14	2.12	2.11	2.10	2.10	2.11	
155	3.49	3.38	3.20	2.97	2.72	2.54	2.41	2.35	2.33	2.32	2.30	2.28	2.26	2.24	2.22	2.22	2.21	2.21	2.22	
160	2.53	2.51	2.48	2.45	2.43	2.41	2.40	2.39	2.38	2.37	2.37	2.36	2.36	2.34	2.33	2.33	2.32	2.32	2.32	
165	2.51	2.50	2.49	2.47	2.46	2.45	2.44	2.43	2.43	2.42	2.41	2.41	2.39	2.39	2.38	2.38	2.37	2.37	2.38	
170	2.52	2.51	2.51	2.50	2.49	2.48	2.48	2.47	2.47	2.46	2.45	2.44	2.44	2.44	2.43	2.43	2.43	2.43	2.43	
175	2.53	2.53	2.52	2.52	2.51	2.51	2.51	2.50	2.50	2.50	2.49	2.49	2.49	2.49	2.49	2.49	2.48	2.49	2.49	
180	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG

Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: ABH14O2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--4																UNIT: cd			
C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374				
5	371	372	372	372	372	372	372	372	372	372	373	373	373	373	374				
10	369	369	369	369	369	369	369	369	369	369	369	370	370	370	371				
15	361	361	361	362	362	363	364	364	364	364	364	364	364	364	365				
20	352	352	352	352	352	353	353	354	355	356	355	355	355	355	356				
25	342	342	342	342	342	342	342	342	343	343	344	345	345	345	345				
30	333	333	332	332	331	330	330	329	329	330	330	331	332	331	332				
35	315	316	317	318	320	318	317	316	315	314	314	315	316	316	316				
40	294	295	296	297	299	300	302	301	299	298	297	297	298	298	298				
45	274	275	275	276	277	278	280	281	283	280	278	277	277	278	278				
50	254	254	255	255	256	256	257	258	259	261	259	257	255	256	256				
55	229	230	232	234	235	235	234	234	235	235	237	234	232	231	231				
60	203	205	206	208	209	210	212	211	210	210	210	211	207	205	206				
65	176	177	179	181	183	184	184	185	186	185	183	183	183	180	179				
70	147	149	152	154	156	157	158	158	159	159	159	157	156	155	153				
75	119	121	124	126	128	130	131	132	133	134	133	133	132	131	128				
80	91.0	93.5	96.4	99.4	102	104	106	108	109	110	110	110	109	108	107				
85	67.8	69.3	71.1	73.0	74.5	76.4	78.8	81.5	84.2	87.1	88.1	88.6	88.5	87.9	86.4				
90	44.9	45.5	46.1	46.6	46.8	47.5	48.7	50.4	51.8	47.8	42.8	47.5	59.9	69.7	41.9				
95	22.1	21.7	21.1	20.2	19.0	18.5	18.6	19.1	19.2	9.46	1.39	12.7	38.3	40.5	17.9				
100	0.81	0.88	1.00	1.20	1.82	3.85	6.73	8.82	9.56	6.69	3.09	15.1	27.1	27.3	28.1				
105	1.38	1.78	2.15	2.53	3.56	5.77	8.49	8.39	5.85	2.58	2.71	6.57	5.50	3.42	1.87				
110	1.90	2.60	3.27	3.77	5.03	7.47	10.2	9.77	7.56	8.15	10.3	8.40	6.35	7.06	5.33				
115	2.36	3.29	4.30	4.87	6.15	8.62	11.0	12.7	13.0	15.2	20.3	19.6	20.6	23.8	22.8				
120	2.62	3.56	4.67	5.41	6.63	8.79	11.1	13.3	15.3	18.6	21.5	23.5	25.1	26.9	27.7				
125	2.33	3.02	4.27	5.46	6.81	8.77	11.0	13.0	15.1	17.3	19.5	21.5	23.3	24.4	25.1				
130	2.10	2.49	3.64	5.08	6.58	8.54	10.7	12.2	13.7	15.4	17.3	19.2	20.4	21.1	21.5				
135	1.95	2.11	2.82	4.27	5.81	7.34	8.98	10.5	11.9	13.4	14.9	16.2	17.0	17.6	17.8				
140	1.90	1.92	2.16	3.13	4.32	5.62	6.97	8.34	9.54	10.8	11.9	12.9	13.5	13.9	14.1				
145	2.01	2.02	2.08	2.36	2.96	3.85	4.92	6.04	7.12	8.04	8.77	9.41	9.86	10.1	10.2				
150	2.12	2.13	2.15	2.19	2.32	2.55	2.95	3.74	4.54	5.28	5.90	6.41	6.74	6.94	6.98				
155	2.23	2.24	2.25	2.27	2.28	2.29	2.32	2.39	2.58	2.94	3.30	3.62	3.85	3.97	3.97				
160	2.33	2.33	2.34	2.34	2.35	2.36	2.36	2.38	2.39	2.41	2.43	2.46	2.48	2.50	2.51				
165	2.38	2.38	2.39	2.40	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.48	2.49	2.51	2.53				
170	2.43	2.44	2.44	2.44	2.45	2.45	2.46	2.47	2.48	2.49	2.49	2.50	2.51	2.52	2.53				
175	2.49	2.49	2.49	2.49	2.49	2.50	2.50	2.50	2.51	2.51	2.52	2.52	2.53	2.53	2.54				
180	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54				

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-04

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG

Humidity:65.0%
Test Distance:9.782m [K=1.0000]
Remarks: