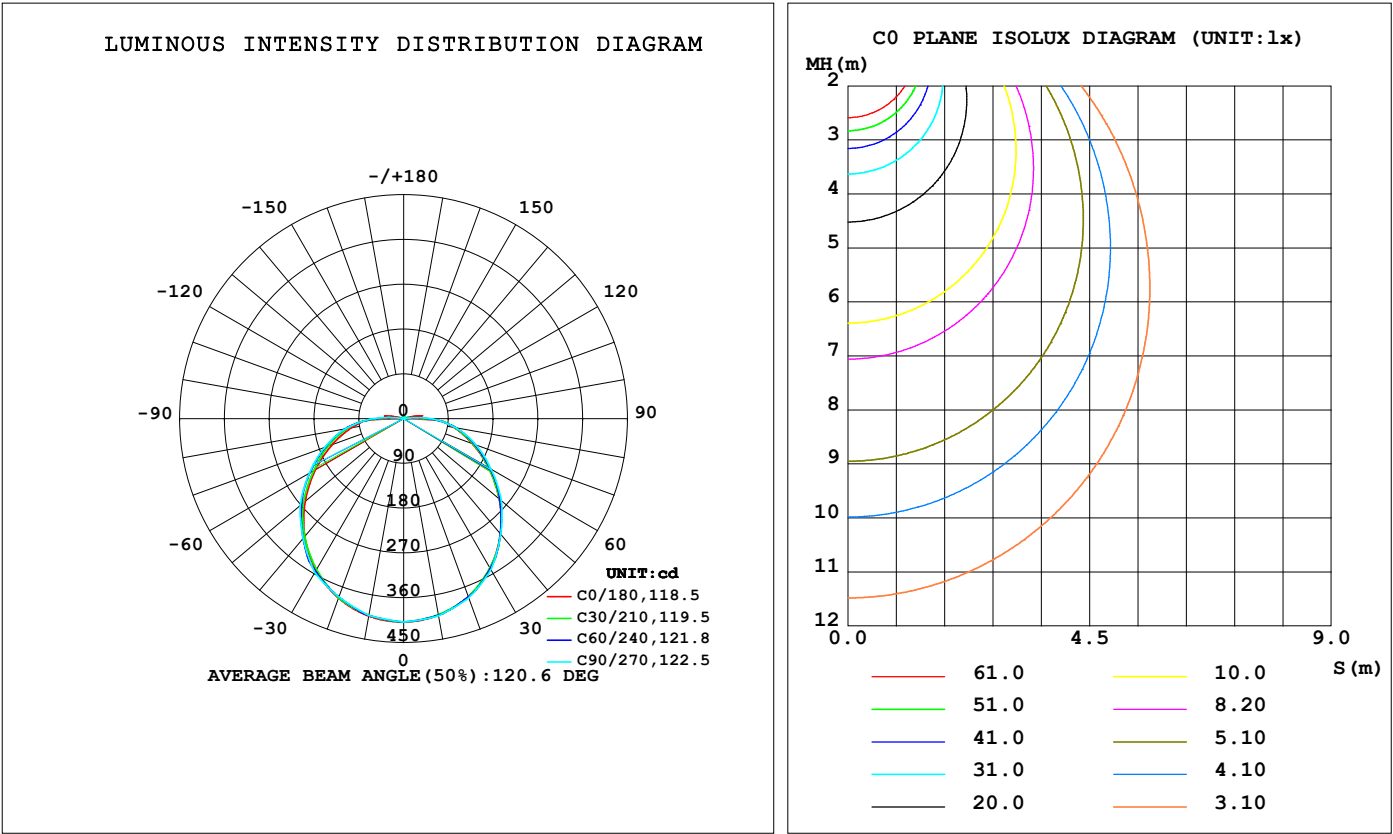


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 101.69 lm/W
MODEL	ABH14R2TW 3000K	Imax (cd)	408.7	S/MH (C0/180)	1.28	
NOMINAL POWER(W)	13.9	LOR (%)	100.0	S/MH (C90/270)	1.29	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1406.4	η UP,DN (C0-180)	1.5,47.7	
NOMINAL FLUX(lm)	1406.41	CIE CLASS	DIRECT	η UP,DN (C180-360)	1.6,49.2	
LAMPS INSIDE	1	η up (%)	3.2	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	96.8	CIBSE SHR MAX	1.35	



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	401.2	400.3	402.4	401.6	402.9	401.1	401.7	399.7	0- 10	38.59	38.59	2.74,2.74
20	380.4	379.9	383.2	382.5	383.8	381.3	381.3	378.7	10- 20	110.8	149.4	10.6,10.6
30	346.9	347.8	350.9	351.5	352.0	351.4	357.3	347.8	20- 30	169.2	318.6	22.7,22.7
40	302.5	304.0	303.5	309.3	309.2	315.2	314.3	310.0	30- 40	206.6	525.2	37.3,37.3
50	250.5	250.5	256.2	255.9	258.2	264.3	271.2	258.9	40- 50	218.7	743.9	52.9,52.9
60	196.8	199.6	202.4	204.4	204.2	215.0	218.5	210.0	50- 60	207.8	951.8	67.7,67.7
70	146.4	149.8	154.4	153.8	152.6	164.6	168.7	159.9	60- 70	179.1	1131	80.4,80.4
80	102.2	105.9	106.4	108.3	106.4	117.7	119.0	114.5	70- 80	140.4	1271	90.4,90.4
90	0.9301	47.97	53.73	48.73	0.7843	54.24	59.97	52.29	80- 90	90.64	1362	96.8,96.8
100	35.27	2.206	1.035	2.135	33.74	3.477	0.9851	2.612	90-100	28.46	1390	98.9,98.9
110	2.584	1.452	1.295	1.540	1.470	1.788	1.298	1.500	100-110	6.786	1397	99.3,99.3
120	2.148	1.760	1.555	2.375	3.650	2.407	1.610	2.000	110-120	2.044	1399	99.5,99.5
130	2.123	1.843	1.818	2.292	2.528	2.039	1.784	2.031	120-130	2.230	1402	99.7,99.7
140	1.971	1.960	2.082	2.188	2.089	2.018	1.957	1.957	130-140	1.570	1403	99.8,99.8
150	2.159	2.188	2.259	2.395	2.242	2.258	2.145	2.163	140-150	1.328	1404	99.9,99.9
160	2.388	2.358	2.436	2.456	2.443	2.388	2.332	2.323	150-160	1.067	1405	99.9,99.9
170	2.527	2.501	2.488	2.499	2.540	2.471	2.447	2.468	160-170	0.6911	1406	100,100
180	2.540	2.540	2.540	2.540	2.561	2.561	2.561	2.561	170-180	0.2395	1406	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 634.57 lm

%lum = 45.1%
%lamp = 45.1%

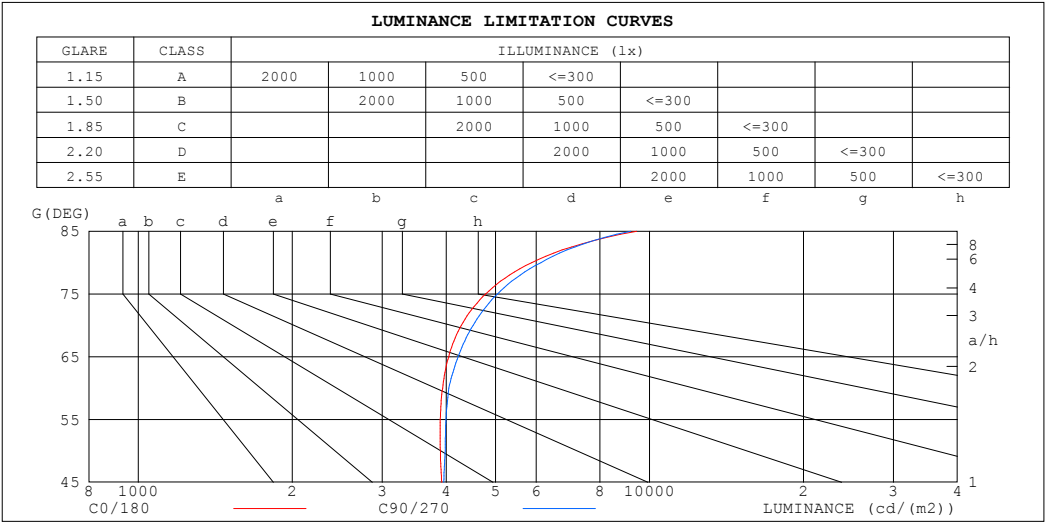
Conical surface Flux(120deg): 951.78 lm

%lum = 67.7%
%lamp = 67.7%

H(β) Range:-90 - 90DEG H(β) Interval: 1.0DEG Test Speed: HIGH Temperature:25.3°C Operators: Test Date:2023-09-05	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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LUMINANCE LIMITATION CURVES

NAME: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9442	9188
80	5885	6129
75	4780	5040
70	4282	4515
65	4046	4222
60	3936	4049
55	3896	3998
50	3897	3986
45	3919	3958

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-05

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: ABH14R2TW 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	.375	.213	.068	.367	.209	.066	.351	.201	.064	.337	.194	.062	.324	.188	.061															
2.0	.330	.181	.056	.323	.178	.055	.309	.172	.053	.297	.166	.052	.285	.161	.051															
3.0	.296	.157	.047	.289	.155	.047	.277	.150	.046	.266	.146	.045	.255	.141	.044															
4.0	.268	.139	.041	.262	.137	.041	.251	.133	.040	.241	.129	.039	.231	.126	.038															
5.0	.244	.124	.036	.239	.123	.036	.229	.119	.035	.220	.116	.035	.212	.113	.034															
6.0	.224	.112	.032	.219	.111	.032	.211	.108	.031	.203	.105	.031	.195	.103	.030															
7.0	.207	.102	.029	.203	.101	.029	.195	.099	.028	.188	.096	.028	.181	.094	.028															
8.0	.192	.094	.026	.188	.093	.026	.181	.091	.026	.175	.089	.026	.169	.087	.025															
9.0	.179	.087	.024	.176	.086	.024	.170	.084	.024	.164	.082	.023	.158	.080	.023															
10.0	.168	.081	.022	.165	.080	.022	.159	.078	.022	.154	.076	.022	.149	.075	.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	.215	.215	.215	.183	.183	.183	.125	.125	.125	.072	.072	.072	.023	.023	.023	
1.0	.209	.180	.153	.179	.154	.132	.122	.106	.091	.070	.061	.053	.023	.020	.017	
2.0	.202	.156	.118	.173	.134	.102	.118	.093	.071	.068	.054	.042	.022	.017	.014	
3.0	.194	.139	.095	.166	.120	.083	.114	.083	.058	.066	.049	.034	.021	.016	.011	
4.0	.186	.126	.080	.160	.109	.070	.110	.076	.049	.064	.044	.029	.020	.014	.010	
5.0	.178	.116	.070	.153	.100	.061	.105	.070	.043	.061	.041	.025	.020	.013	.008	
6.0	.171	.108	.062	.147	.093	.054	.101	.065	.038	.059	.038	.023	.019	.013	.008	
7.0	.163	.101	.057	.141	.087	.050	.097	.061	.035	.056	.036	.021	.018	.012	.007	
8.0	.157	.095	.053	.135	.082	.046	.093	.058	.033	.054	.034	.019	.018	.011	.006	
9.0	.150	.090	.050	.129	.078	.043	.090	.055	.031	.052	.032	.018	.017	.011	.006	
10.0	.144	.086	.047	.124	.075	.041	.086	.052	.029	.050	.031	.017	.016	.010	.006	

H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2023-09-05

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: ABH14R2TW 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	16.0	17.6	16.3	17.8	18.1	16.1	17.7	16.4	18.0	18.2				
3H	18.0	19.4	18.3	19.7	20.0	18.2	19.7	18.5	20.0	20.3				
4H	19.0	20.4	19.4	20.7	21.1	19.3	20.7	19.6	21.0	21.3				
6H	20.1	21.4	20.5	21.8	22.1	20.4	21.7	20.8	22.0	22.4				
8H	20.7	22.0	21.1	22.3	22.7	20.9	22.2	21.3	22.6	22.9				
12H	21.3	22.6	21.7	22.9	23.3	21.5	22.8	21.9	23.1	23.5				
4H 2H	16.7	18.1	17.1	18.4	18.8	16.8	18.2	17.2	18.5	18.9				
3H	18.9	20.2	19.4	20.5	20.9	19.1	20.4	19.5	20.7	21.1				
4H	20.2	21.3	20.6	21.7	22.1	20.4	21.5	20.8	21.9	22.3				
6H	21.4	22.5	21.9	22.9	23.3	21.7	22.7	22.1	23.1	23.5				
8H	22.1	23.1	22.6	23.5	24.0	22.3	23.3	22.8	23.7	24.2				
12H	22.9	23.8	23.4	24.2	24.7	23.0	23.9	23.5	24.4	24.9				
8H 4H	20.7	21.6	21.1	22.1	22.5	20.9	21.8	21.3	22.2	22.7				
6H	22.2	23.0	22.7	23.5	24.0	22.4	23.2	22.9	23.7	24.2				
8H	23.1	23.8	23.6	24.3	24.8	23.3	24.0	23.8	24.5	25.0				
12H	24.1	24.7	24.6	25.2	25.8	24.2	24.8	24.7	25.3	25.9				
12H 4H	20.8	21.7	21.3	22.1	22.6	21.0	21.8	21.4	22.3	22.8				
6H	22.4	23.2	23.0	23.7	24.2	22.6	23.4	23.1	23.8	24.4				
8H	23.4	24.1	23.9	24.6	25.1	23.6	24.2	24.1	24.7	25.3				
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 / - 0.3								

CIE Pub.117, 1406 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.2)
Area: 0.1 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:2023-09-05

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: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

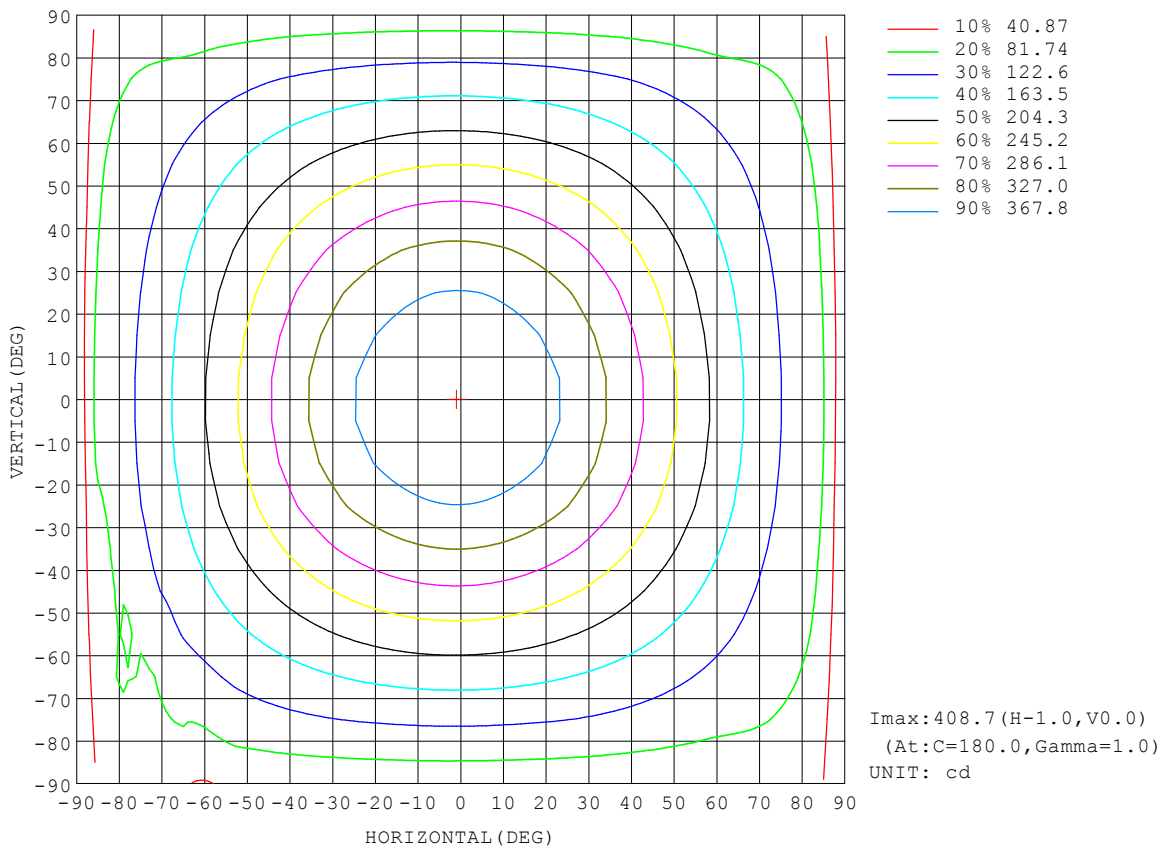
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	53	41	34	51	40	34	27
0.80	63	50	43	62	50	42	60	49	42	35
1.00	71	59	51	70	58	50	67	60	50	42
1.25	78	66	58	76	65	58	73	64	57	49
1.50	83	72	64	81	71	63	78	69	62	54
2.00	90	80	72	88	79	72	84	76	70	61
2.50	94	85	78	92	83	77	88	80	75	65
3.00	98	89	83	95	88	82	91	84	79	69
4.00	102	95	89	100	93	88	95	89	85	75
5.00	105	99	94	102	97	92	97	93	89	78
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:2023-09-05

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

ISOCANDELA DIAGRAM

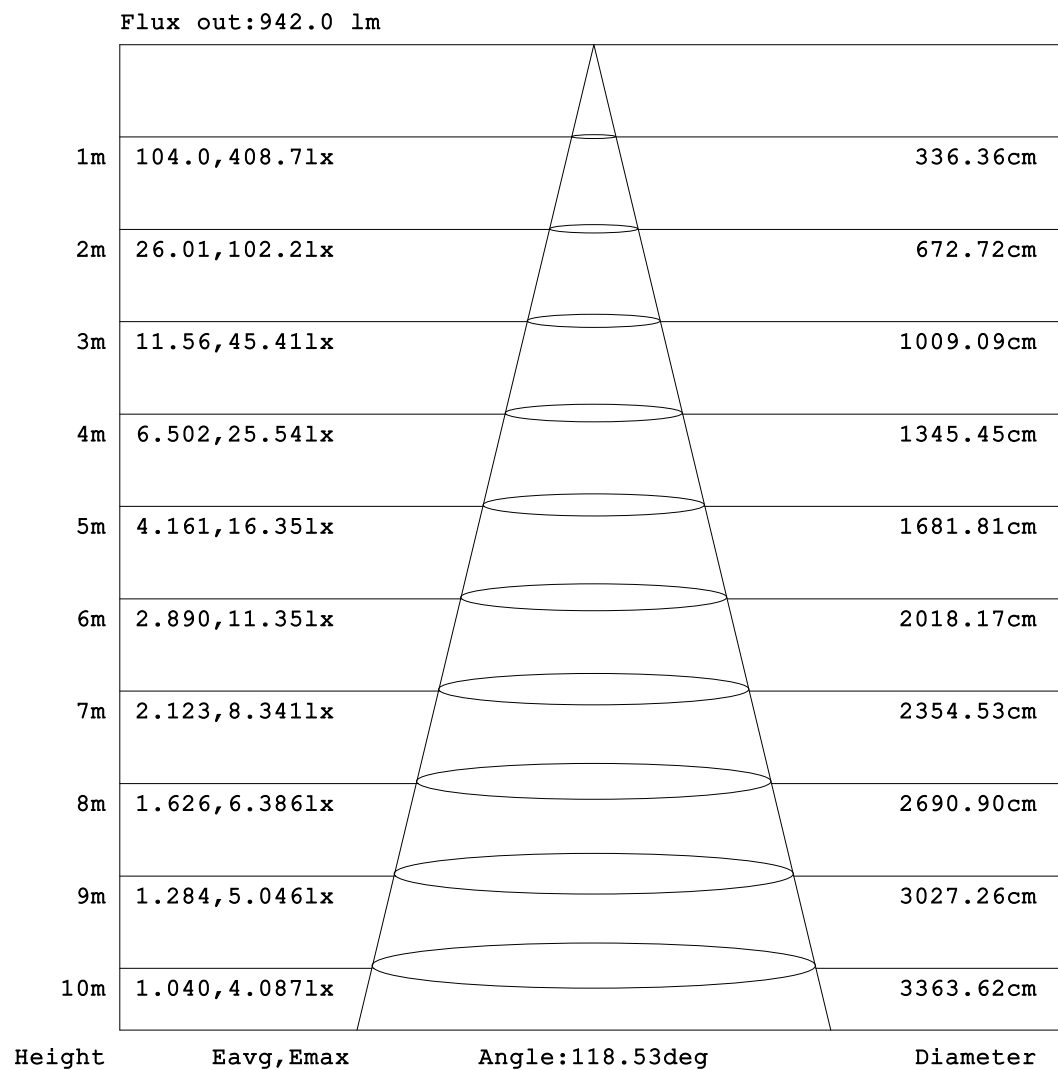
NAME: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



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°C	Humidity: 65.0%
Operators:	Test Distance: 9.782m [K=1.0000]
Test Date: 2023-09-05	Remarks:

AAI Figure

NAME: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

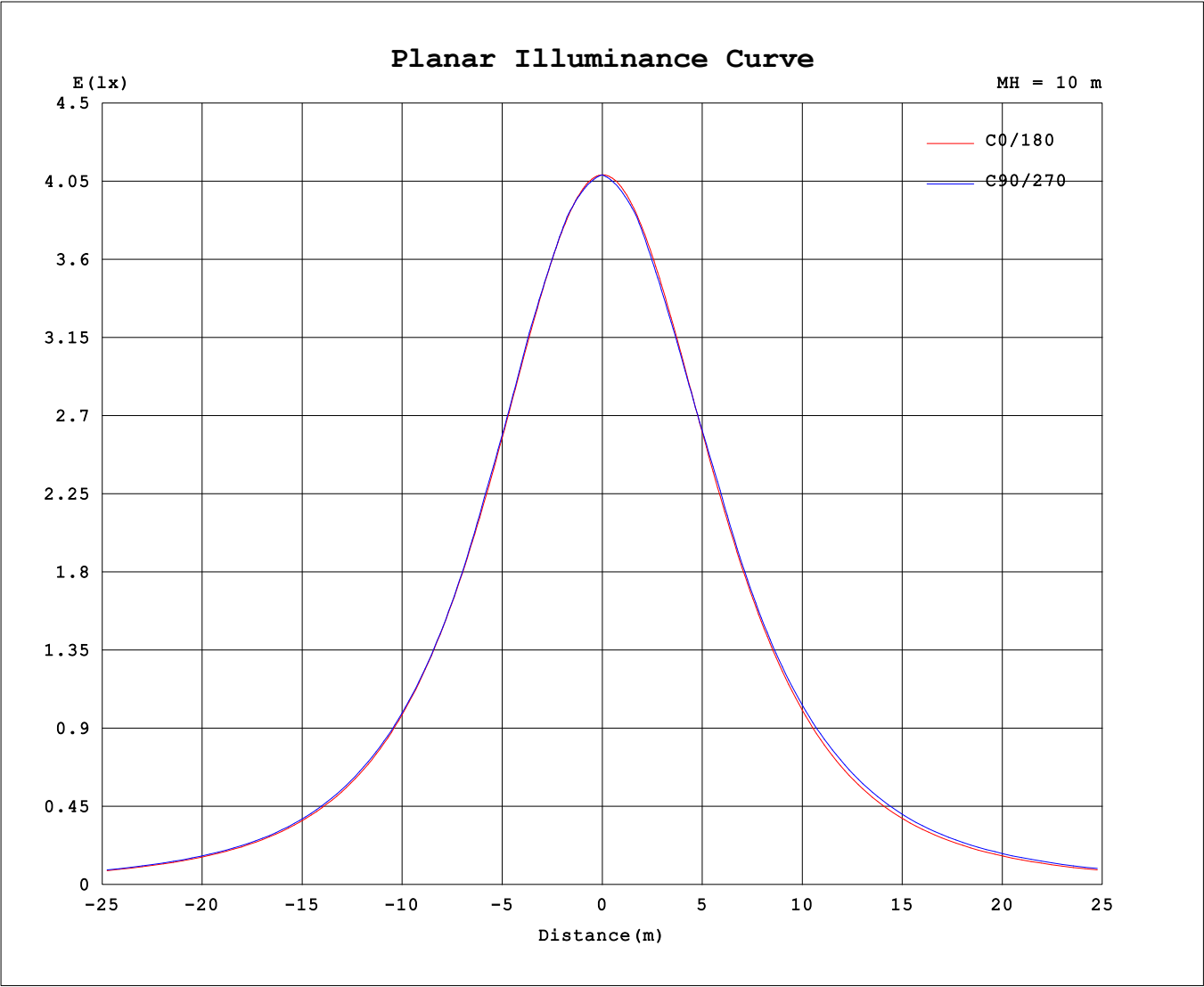


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:2023-09-05

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:2023-09-05

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: ABH14R2TW 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	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409
5	407	406	406	406	406	406	406	405	405	405	405	405	405	405	405	405	405	406	406
10	401	401	400	400	400	400	400	400	400	400	401	401	401	401	402	402	402	402	402
15	392	392	391	391	391	391	392	392	393	393	392	392	392	392	392	392	393	393	393
20	380	379	379	379	379	380	381	380	380	380	380	380	381	381	382	382	383	383	383
25	365	364	364	364	365	365	364	365	365	366	367	367	366	366	366	366	367	367	367
30	347	346	345	346	346	346	346	347	348	348	348	348	348	349	349	350	350	351	351
35	326	325	325	326	325	326	327	327	326	327	327	328	328	327	327	327	327	327	327
40	303	301	302	302	302	303	303	303	304	304	303	303	302	302	302	303	303	303	304
45	277	276	277	276	278	277	278	279	278	277	277	277	277	278	278	279	279	279	280
50	250	249	250	250	251	251	251	251	250	251	251	252	252	253	254	255	255	256	256
55	223	223	223	224	224	224	223	223	224	225	226	227	227	228	228	228	229	229	229
60	197	196	197	197	197	197	197	198	199	200	200	200	200	201	201	201	202	202	202
65	171	171	171	171	171	171	172	173	173	174	174	174	175	176	177	177	178	178	178
70	146	146	147	146	147	148	148	149	149	150	151	151	152	153	153	153	154	154	154
75	124	124	123	124	125	125	126	126	127	127	128	129	129	129	130	130	130	130	130
80	102	102	102	103	103	104	104	105	105	106	106	107	107	107	106	106	106	106	106
85	82.3	82.5	83.3	83.5	83.9	84.2	84.2	82.0	80.8	80.1	79.8	79.7	79.6	79.6	79.6	79.6	79.8	80.0	80.1
90	0.93	40.2	65.7	65.8	59.6	50.6	43.4	45.5	46.8	48.0	49.1	50.1	50.8	51.7	52.3	52.8	53.3	53.7	53.7
95	1.90	8.40	15.3	49.0	38.2	18.6	2.24	9.07	12.9	15.9	18.5	20.6	22.1	23.7	25.0	26.0	26.8	27.3	27.4
100	35.3	35.3	33.2	35.8	32.3	19.3	7.18	3.94	2.48	2.21	1.93	1.64	1.05	1.00	1.00	1.03	1.10	1.20	1.03
105	17.1	16.6	18.0	17.9	18.4	16.8	9.76	2.98	1.87	1.78	1.67	1.61	1.19	1.15	1.14	1.16	1.21	1.29	1.16
110	2.58	2.79	3.91	4.13	4.47	7.11	4.78	1.59	1.36	1.45	1.45	1.63	1.35	1.29	1.28	1.29	1.33	1.38	1.29
115	1.53	1.50	1.61	1.66	1.62	2.26	2.30	2.45	1.96	1.53	1.54	1.67	1.48	1.43	1.41	1.41	1.44	1.47	1.42
120	2.15	2.18	2.37	2.47	2.43	2.43	3.45	3.17	2.24	1.76	1.79	1.67	1.58	1.56	1.54	1.54	1.55	1.55	1.55
125	3.30	3.23	3.22	3.03	2.60	3.00	3.33	2.97	2.25	1.89	1.78	1.71	1.69	1.69	1.68	1.68	1.69	1.69	1.69
130	2.12	2.17	2.09	1.97	2.10	2.39	2.40	2.24	2.05	1.84	1.80	1.80	1.81	1.81	1.81	1.83	1.83	1.82	1.82
135	1.88	1.87	1.87	1.87	1.85	1.96	2.00	1.98	1.89	1.88	1.89	1.92	1.94	1.95	1.96	1.97	1.97	1.96	1.95
140	1.97	1.95	1.94	1.92	1.91	1.94	1.96	1.94	1.95	1.96	2.00	2.02	2.04	2.07	2.08	2.10	2.10	2.09	2.08
145	2.07	2.05	2.04	2.03	2.02	2.02	2.03	2.05	2.05	2.10	2.10	2.11	2.14	2.15	2.18	2.19	2.18	2.18	2.17
150	2.16	2.14	2.13	2.13	2.13	2.13	2.14	2.18	2.21	2.19	2.20	2.23	2.22	2.24	2.28	2.27	2.27	2.26	2.26
155	2.28	2.26	2.25	2.26	2.26	2.27	2.26	2.26	2.27	2.31	2.31	2.30	2.32	2.38	2.37	2.36	2.36	2.35	2.35
160	2.39	2.37	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.37	2.41	2.45	2.44	2.44	2.44	2.44	2.44	2.44
165	2.47	2.46	2.45	2.44	2.43	2.43	2.43	2.43	2.45	2.47	2.47	2.47	2.47	2.47	2.47	2.46	2.46	2.46	2.46
170	2.53	2.52	2.52	2.52	2.52	2.52	2.51	2.51	2.50	2.50	2.50	2.50	2.50	2.49	2.49	2.49	2.49	2.49	2.49
175	2.53	2.54	2.54	2.53	2.53	2.53	2.53	2.53	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.51	2.51	2.51
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:2023-09-05

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: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--2																	UNIT: cd		
<div>C (DEG) γ (DEG)</div>	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409
5	406	406	406	406	406	406	406	406	406	406	406	406	406	407	407	407	407	408	407
10	402	402	402	402	402	402	402	402	402	401	401	401	401	402	402	402	402	403	402
15	393	393	393	393	393	394	394	394	395	395	395	394	394	394	394	394	394	395	394
20	383	383	383	383	383	383	383	382	383	383	383	384	383	383	382	382	383	384	383
25	367	367	368	368	368	369	369	370	369	368	368	369	369	369	368	368	368	369	368
30	351	351	351	351	351	351	351	351	351	352	352	351	351	352	352	351	351	352	351
35	328	328	328	329	330	331	332	331	331	331	332	332	331	331	332	331	331	332	331
40	304	304	304	305	305	306	307	308	309	309	309	309	310	309	309	309	308	309	308
45	280	280	281	281	281	281	281	282	283	284	285	284	284	285	284	285	284	285	283
50	256	257	257	256	256	256	256	256	256	256	257	259	258	258	258	258	258	258	257
55	230	230	230	230	231	231	231	230	230	230	230	230	232	231	232	231	231	231	231
60	203	203	203	204	204	204	204	204	204	204	203	203	204	205	204	204	204	204	204
65	179	179	179	179	179	178	178	178	178	178	178	178	177	177	178	178	178	178	178
70	155	155	155	155	155	155	154	154	154	154	153	153	153	152	152	153	153	153	152
75	131	131	131	131	131	131	131	131	131	130	130	129	129	129	128	129	129	129	129
80	107	107	107	107	108	108	108	108	108	108	107	103	102	100	95.3	94.2	106	106	107
85	80.2	80.2	80.1	80.2	80.3	80.4	80.7	81.2	81.7	82.4	81.4	75.0	77.6	78.4	77.4	84.9	74.7	85.5	86.4
90	53.8	53.6	53.1	52.7	52.1	51.4	50.7	49.9	48.7	47.2	44.8	38.1	46.7	56.6	66.2	67.4	44.5	0.78	48.3
95	27.5	27.0	26.2	25.3	24.0	22.3	20.6	18.8	16.0	12.0	8.68	1.84	16.6	36.1	48.5	20.6	12.2	3.90	15.4
100	1.31	1.25	1.13	1.10	1.07	1.09	1.39	2.03	2.14	1.54	2.85	5.97	16.8	30.2	34.7	33.0	33.8	33.7	34.8
105	1.37	1.33	1.25	1.23	1.24	1.28	1.50	1.96	1.84	1.37	1.79	6.97	14.4	15.8	14.6	14.6	13.2	13.4	14.2
110	1.42	1.41	1.37	1.35	1.39	1.44	1.62	2.00	1.54	1.41	1.80	3.34	5.75	4.10	2.60	3.15	1.74	1.47	2.04
115	1.48	1.49	1.47	1.48	1.53	1.60	1.76	2.05	1.84	2.10	2.93	3.29	2.62	2.09	2.29	2.38	2.14	2.04	2.21
120	1.53	1.55	1.57	1.60	1.63	1.73	1.85	2.06	2.37	2.53	3.37	4.80	4.14	3.40	4.11	4.14	3.71	3.65	3.69
125	1.65	1.67	1.69	1.71	1.74	1.82	1.89	2.07	2.36	2.81	3.33	3.62	3.81	3.60	3.51	3.79	3.87	3.70	4.00
130	1.78	1.79	1.81	1.83	1.86	1.90	1.97	2.09	2.29	2.49	2.71	2.73	2.72	2.60	2.54	2.63	2.64	2.53	2.69
135	1.90	1.92	1.93	1.95	1.98	2.01	2.05	2.10	2.18	2.26	2.32	2.34	2.23	2.12	2.16	2.17	2.17	2.14	2.16
140	2.03	2.04	2.05	2.06	2.08	2.11	2.14	2.17	2.19	2.22	2.23	2.22	2.16	2.14	2.11	2.10	2.10	2.09	2.08
145	2.13	2.14	2.15	2.16	2.18	2.21	2.24	2.27	2.29	2.29	2.30	2.27	2.24	2.22	2.21	2.20	2.21	2.21	2.19
150	2.23	2.24	2.25	2.26	2.28	2.30	2.33	2.37	2.40	2.42	2.39	2.36	2.32	2.31	2.28	2.26	2.24	2.24	2.24
155	2.34	2.34	2.35	2.36	2.38	2.40	2.42	2.44	2.44	2.45	2.44	2.44	2.42	2.39	2.36	2.34	2.33	2.34	2.33
160	2.44	2.44	2.44	2.44	2.44	2.45	2.45	2.45	2.46	2.46	2.46	2.45	2.44	2.44	2.43	2.43	2.43	2.44	2.43
165	2.46	2.46	2.46	2.47	2.47	2.47	2.47	2.48	2.47	2.47	2.48	2.48	2.48	2.49	2.49	2.50	2.50	2.54	2.53
170	2.49	2.49	2.49	2.49	2.49	2.50	2.49	2.50	2.50	2.50	2.51	2.51	2.52	2.52	2.52	2.52	2.52	2.54	2.53
175	2.51	2.51	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.53	2.53	2.53	2.53	2.53	2.54	2.54	2.55	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	2.54	2.54	2.56	2.56

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-05

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: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--3																		UNIT: cd	
<div>C (DEG) γ (DEG)</div>	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409
5	407	407	406	406	406	406	406	406	406	406	405	405	405	405	405	405	405	405	405
10	402	402	401	401	401	401	401	401	401	401	401	402	402	402	402	402	402	402	401
15	394	393	393	393	394	394	394	394	393	393	393	392	392	392	392	392	391	391	391
20	382	382	382	383	383	382	382	381	381	381	381	381	381	381	381	381	381	381	381
25	368	368	369	368	368	367	367	367	368	368	368	369	369	369	369	369	369	369	369
30	351	351	351	350	350	350	351	351	352	353	354	355	356	357	357	357	357	357	356
35	331	332	330	330	331	331	333	334	336	338	338	337	337	337	336	336	336	336	335
40	309	308	308	308	309	311	313	315	315	314	314	314	315	315	315	315	314	314	313
45	285	283	283	285	287	290	290	290	290	290	291	292	292	293	293	293	293	292	292
50	258	257	258	261	263	263	263	264	265	267	268	269	270	271	271	271	271	271	270
55	230	231	233	236	236	237	238	239	241	243	244	245	245	245	245	245	245	244	244
60	204	205	208	208	209	211	213	215	216	217	218	218	219	219	219	219	218	218	218
65	178	180	181	182	185	187	188	189	190	191	192	193	193	194	194	194	194	193	193
70	153	155	157	159	161	162	164	165	166	167	167	168	169	169	169	169	169	168	168
75	130	132	134	136	137	139	140	141	142	143	143	144	144	144	144	144	144	144	143
80	108	110	112	113	114	116	117	118	119	119	119	120	120	119	119	119	119	119	119
85	87.9	89.1	90.4	91.4	92.4	90.8	90.1	89.7	89.5	89.4	89.4	89.5	89.5	89.5	89.5	89.6	89.5	89.3	89.0
90	69.0	63.9	55.4	47.5	48.5	51.5	52.9	54.2	55.3	56.1	57.0	58.0	58.8	59.3	59.7	60.0	60.0	59.8	59.3
95	28.4	44.5	26.4	7.20	5.35	12.3	15.9	18.9	21.2	22.9	24.7	26.5	28.0	29.1	29.9	30.4	30.5	30.3	29.7
100	34.5	35.4	28.6	13.8	7.94	4.75	4.03	3.48	2.64	1.57	1.01	0.96	0.95	0.95	0.97	0.97	0.99	0.96	0.93
105	14.8	14.3	15.6	13.9	6.60	2.49	2.63	2.53	2.33	1.65	1.24	1.17	1.14	1.14	1.15	1.11	1.14	1.16	1.13
110	3.11	2.35	3.93	5.48	3.14	1.82	1.51	1.79	2.26	1.78	1.46	1.37	1.34	1.33	1.33	1.25	1.30	1.36	1.33
115	2.56	2.31	2.23	3.02	3.63	3.04	2.18	1.99	2.26	1.94	1.63	1.57	1.54	1.52	1.51	1.39	1.45	1.56	1.53
120	4.00	4.21	3.90	4.65	5.02	3.53	2.60	2.41	2.11	1.88	1.72	1.69	1.69	1.69	1.68	1.52	1.61	1.75	1.73
125	4.06	3.91	3.91	3.99	3.77	3.40	2.70	2.29	1.98	1.81	1.75	1.74	1.76	1.76	1.74	1.62	1.70	1.80	1.79
130	2.73	2.64	2.63	2.75	2.74	2.59	2.33	2.04	1.88	1.81	1.79	1.80	1.83	1.83	1.80	1.73	1.78	1.85	1.85
135	2.15	2.11	2.06	2.18	2.24	2.19	2.07	1.97	1.89	1.85	1.85	1.89	1.91	1.90	1.87	1.84	1.87	1.89	1.90
140	2.07	2.07	2.08	2.09	2.11	2.09	2.05	2.02	1.99	1.97	1.97	1.98	2.00	1.97	1.95	1.96	1.96	1.95	1.95
145	2.17	2.16	2.15	2.15	2.16	2.16	2.15	2.12	2.11	2.10	2.10	2.10	2.09	2.06	2.05	2.05	2.05	2.04	2.05
150	2.24	2.25	2.25	2.25	2.26	2.27	2.28	2.26	2.24	2.22	2.21	2.19	2.17	2.15	2.15	2.15	2.14	2.14	2.15
155	2.34	2.34	2.34	2.35	2.35	2.35	2.34	2.34	2.33	2.32	2.30	2.28	2.26	2.25	2.24	2.24	2.24	2.24	2.24
160	2.42	2.41	2.40	2.40	2.40	2.40	2.40	2.39	2.38	2.37	2.36	2.35	2.34	2.34	2.34	2.33	2.33	2.33	2.34
165	2.51	2.50	2.48	2.47	2.46	2.45	2.44	2.43	2.42	2.41	2.41	2.40	2.40	2.39	2.39	2.39	2.39	2.39	2.39
170	2.52	2.51	2.50	2.50	2.49	2.49	2.48	2.47	2.46	2.46	2.45	2.45	2.45	2.44	2.44	2.44	2.45	2.44	2.44
175	2.54	2.53	2.53	2.52	2.52	2.52	2.51	2.51	2.51	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
180	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-05

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: ABH14R2TW 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--4																UNIT: cd			
<div>C (DEG) γ (DEG)</div>	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	409	409	409	409	409	409	409	409	409	409	409	409	409	409	409				
5	405	405	405	405	405	405	405	405	405	405	405	406	406	406	406				
10	401	401	401	400	400	400	400	400	399	399	399	400	400	400	401				
15	391	391	391	391	391	391	392	392	391	391	391	391	391	391	392				
20	381	380	380	379	379	379	379	379	379	380	379	379	379	379	379				
25	368	368	367	366	366	365	364	364	363	364	364	364	363	363	364				
30	355	354	353	352	350	349	348	347	346	345	345	346	346	345	345				
35	335	335	334	334	334	332	330	328	326	325	324	324	325	324	324				
40	313	312	312	311	310	310	310	308	305	303	302	301	301	301	301				
45	291	290	289	287	286	285	284	284	284	280	278	276	276	276	276				
50	269	267	266	264	262	261	259	257	256	256	253	251	249	249	249				
55	243	242	241	240	239	237	234	232	230	229	228	225	223	222	222				
60	217	216	215	214	213	211	210	208	205	203	201	200	197	196	196				
65	192	191	190	188	187	186	184	183	181	179	176	174	173	171	170				
70	167	166	166	164	163	161	160	158	157	155	154	151	149	147	146				
75	143	142	142	141	140	138	137	135	134	132	131	129	127	125	123				
80	118	118	118	117	117	116	115	113	112	110	109	107	106	104	102				
85	88.7	88.6	88.3	87.9	87.5	87.3	87.2	87.4	88.1	89.6	88.7	87.5	86.0	84.7	83.2				
90	58.8	58.1	57.2	56.0	54.9	53.8	52.3	50.7	49.0	45.6	50.3	58.4	64.9	67.4	43.7				
95	28.8	27.7	26.2	24.3	22.4	20.3	17.5	14.1	10.2	1.85	14.3	33.3	47.2	20.7	10.3				
100	0.94	0.95	0.96	0.99	1.50	2.15	2.61	2.84	3.96	6.86	17.3	31.1	36.2	34.5	36.2				
105	1.13	1.15	1.18	1.25	1.62	1.83	1.99	2.03	2.49	8.38	15.9	17.6	17.3	17.9	17.4				
110	1.32	1.34	1.39	1.47	1.76	1.69	1.50	1.34	1.60	4.07	6.44	4.23	3.87	4.08	3.34				
115	1.51	1.53	1.60	1.68	1.93	1.96	1.62	2.11	2.87	2.76	2.58	1.80	1.91	2.04	1.72				
120	1.68	1.69	1.72	1.76	1.86	2.09	2.00	2.53	3.65	4.43	3.43	3.03	2.88	2.82	2.45				
125	1.74	1.75	1.76	1.79	1.83	1.97	2.17	2.56	3.45	3.90	3.81	3.41	3.82	3.67	3.44				
130	1.80	1.81	1.82	1.83	1.84	1.87	2.03	2.25	2.49	2.70	2.72	2.56	2.48	2.49	2.38				
135	1.87	1.87	1.88	1.89	1.89	1.90	1.90	2.01	2.08	2.12	2.06	1.94	1.99	2.00	1.97				
140	1.94	1.94	1.95	1.97	1.96	1.95	1.96	1.94	1.98	1.98	1.92	1.93	1.94	1.95	1.97				
145	2.05	2.05	2.04	2.04	2.06	2.04	2.02	2.04	2.01	2.00	2.01	2.02	2.03	2.04	2.05				
150	2.16	2.15	2.17	2.14	2.14	2.15	2.16	2.11	2.11	2.12	2.11	2.10	2.11	2.13	2.15				
155	2.25	2.26	2.27	2.28	2.25	2.24	2.23	2.24	2.25	2.23	2.21	2.22	2.23	2.24	2.26				
160	2.34	2.35	2.35	2.35	2.36	2.36	2.32	2.32	2.32	2.32	2.34	2.35	2.35	2.36	2.37				
165	2.39	2.39	2.40	2.41	2.41	2.41	2.42	2.42	2.42	2.43	2.42	2.42	2.43	2.45	2.46				
170	2.44	2.44	2.45	2.45	2.45	2.46	2.47	2.47	2.47	2.48	2.48	2.49	2.50	2.50	2.51				
175	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.51	2.51	2.51	2.52	2.52	2.53	2.53	2.54				
180	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56				

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-09-05

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

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