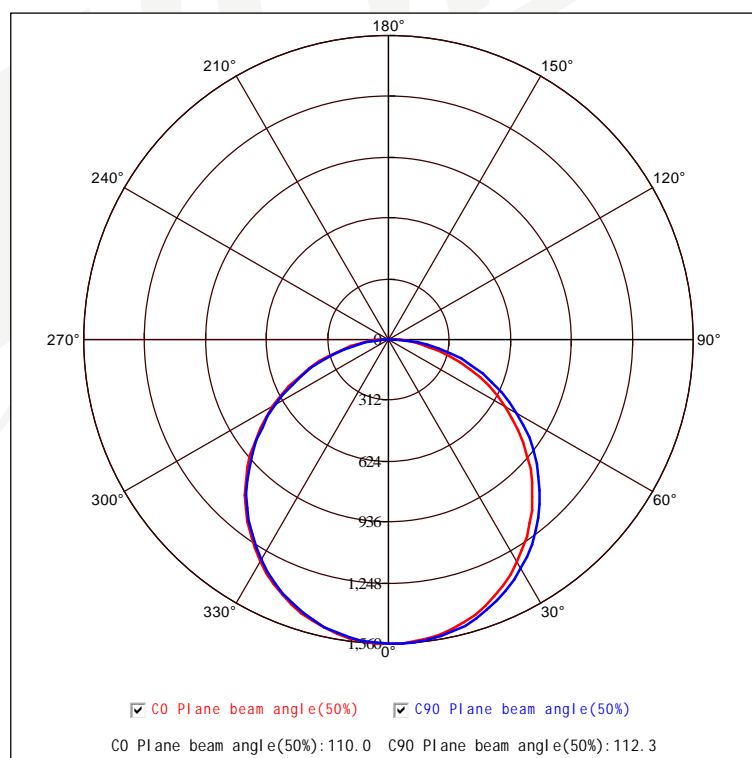


Goniophotometer Test Report

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm						
Lamp Name: D600 4000k			Lamp Type:		Weight(kg):	
Lamp ID:			Lamp Spec:		Shape Size: 600	
Manufactory:			Sur(m^2): 0.241		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model			Peak Value(cd)	1560.9	Effici ency(lm/w)	107.2
Nominal P(w)	1.0		Position	0.0,0.0	UP(C0-C180)	0.0
Rated Volt(v)	230.0		Total Flux(lm)	4388.994	Down(C0-C180)	52.1
Rated Flux(lm)	1.0		Up Flux Rate(%)	0.0	UP(C180-C360)	0.0
Illuminant QTY	1		Dw Flux Rate(%)	100.0	Down(C180-C360)	47.9

Planar Intensity Distribution Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

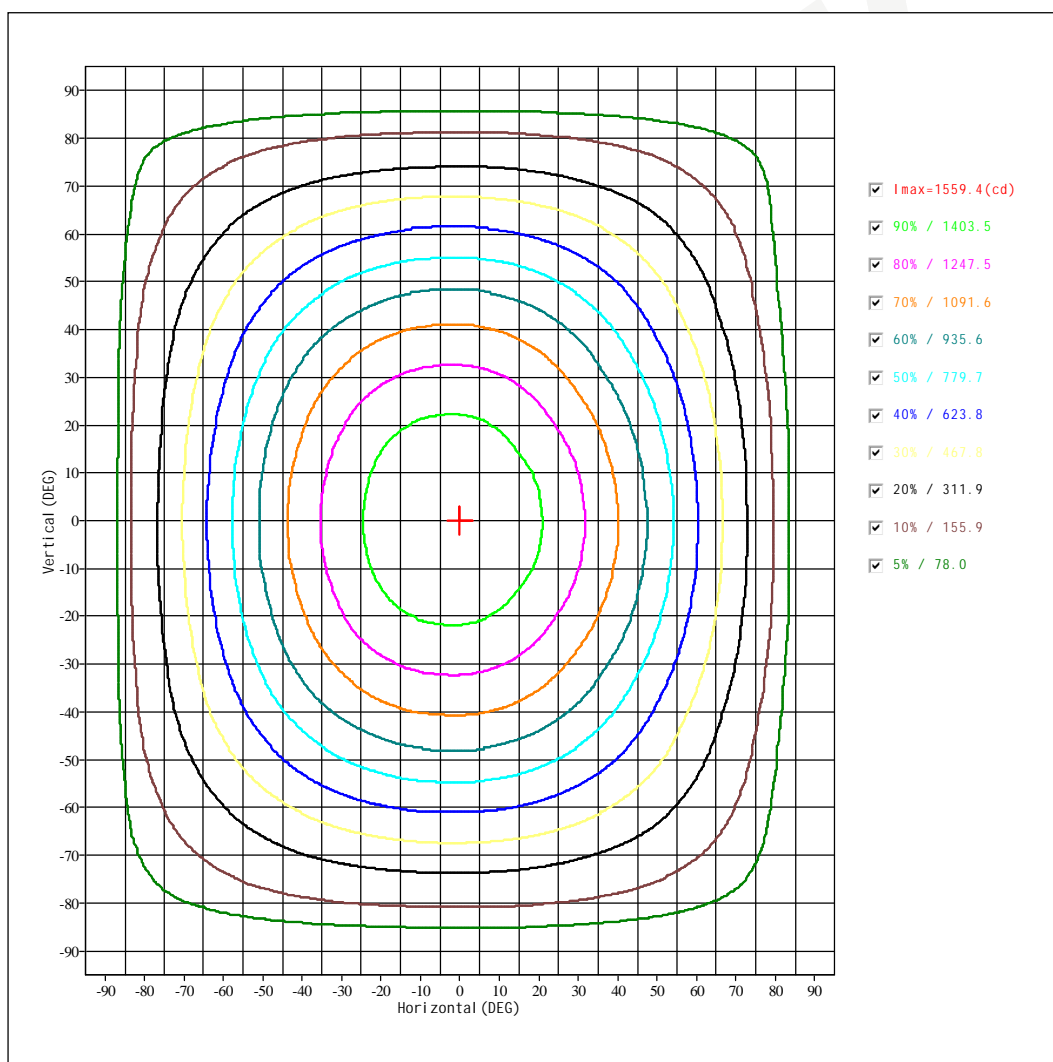
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size: 600
Manufactory:	Sur(m ²): 0.241	Protect Angle(Deg):

Planar IsoCandela Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

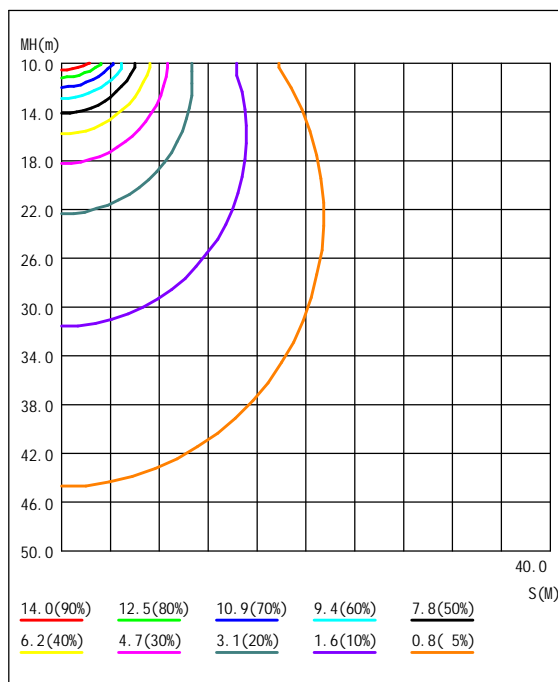
Humidity(%): 60

Date: 2020-04-15

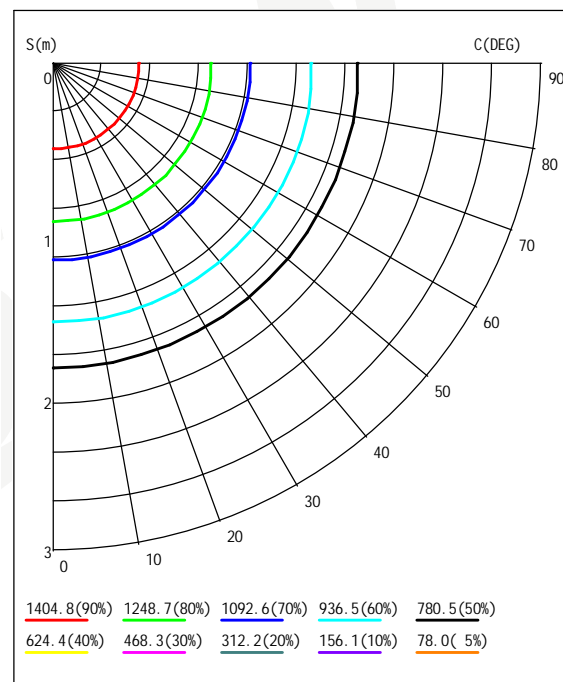
Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 600
Manufactory:	Sur(m^2): 0.241	Protect Angle(Deg):

Spacial ISOLUX Curve



Pl anar ISOLUX Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidi ty(%): 60

Date: 2020-04-15

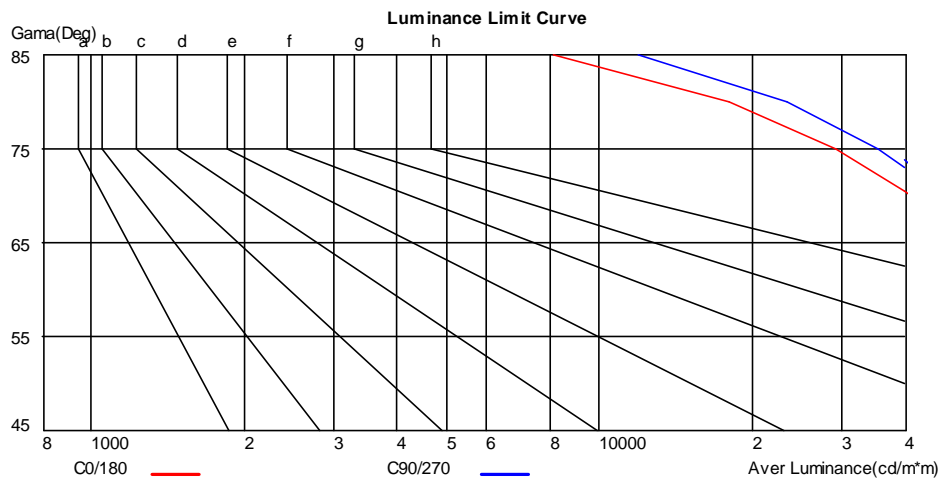
Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 600
Manufactory:	Sur(m^2): 0.241	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m²)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	101216.6	90074.4	78335.9	66181.5	53824.3	41255.5	29167.1	17983.0	8135.4
C90	107031.5	96297.2	85038.3	73044.8	60723.8	48038.4	35426.1	23390.0	11977.4

Glare									
Glare	Class	Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



Gamma Angle Range: -90 - 90(Deg)

Gamma interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

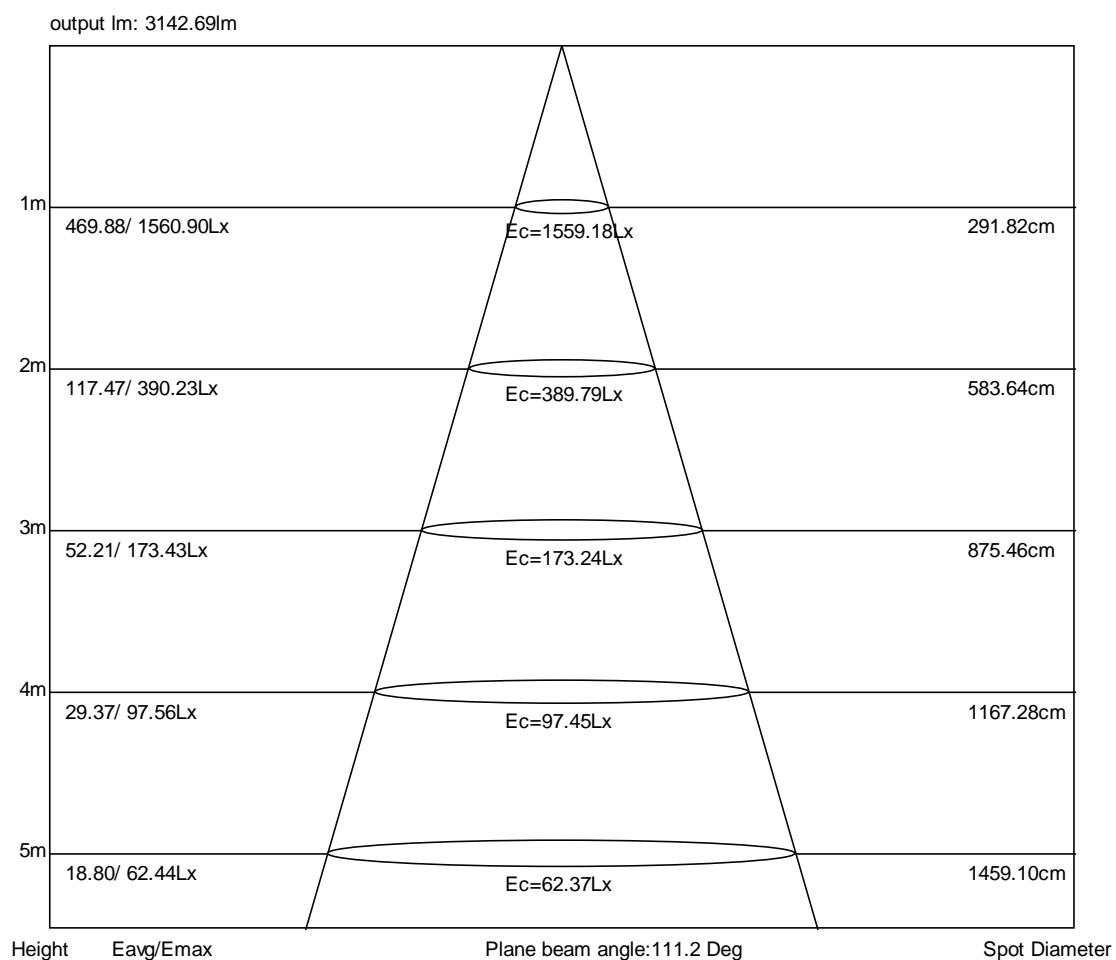
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 600
Manufactory:	Sur(m^2): 0.241	Protect Angle(Deg):

Average Illumination



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

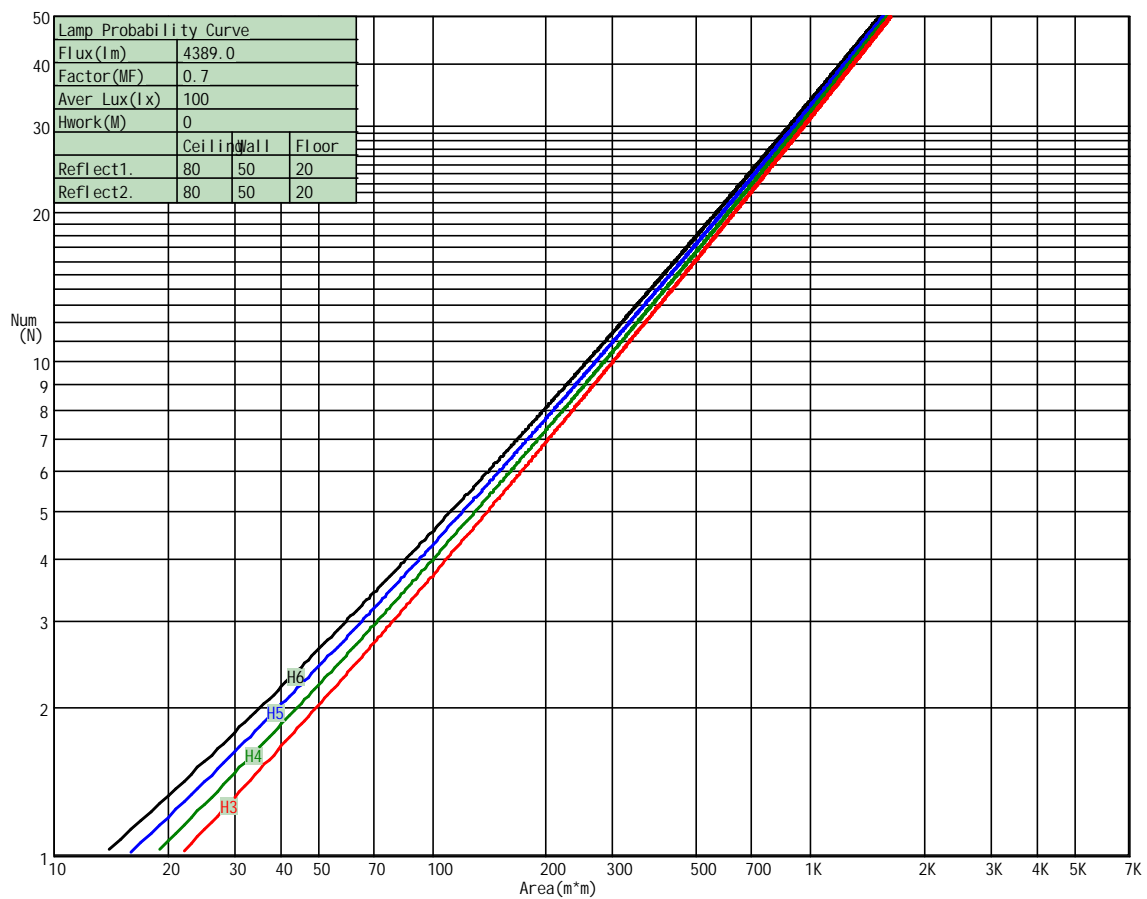
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size: 600
Manufactory:	Sur(m ²): 0.241	Protect Angle(Deg):

Lamp Probability Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 600
Manufactory:	Sur(m^2): 0.241	Protect Angle(Deg):

UF Table

Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5
Wall	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3
Floor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.60	53	38	29	51	37	28	48	36	28
0.80	57	41	30	55	40	29	51	38	29
1.00	60	43	31	58	42	31	53	39	29
1.25	63	45	32	60	43	31	55	40	30
1.50	65	46	32	62	45	32	56	41	30
2.00	68	49	33	64	46	32	57	42	30
2.50	69	49	33	65	47	32	57	42	30
3.00	70	50	33	66	48	32	58	43	29
4.00	71	51	34	67	48	32	58	43	29
5.00	72	52	34	67	49	32	59	43	29

CoEfficients Utilization

Ceiling(%)		0			0			0			0			0	
Wall (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floor (%)		0			0			0			0			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	1.02	1.02	1.02
1	1.04	0.99	0.95	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.91	0.88	0.9	0.88	0.86
2	0.9	0.83	0.78	0.88	0.82	0.77	0.85	0.79	0.75	0.82	0.77	0.73	0.79	0.75	0.72
3	0.79	0.71	0.64	0.78	0.7	0.64	0.75	0.68	0.63	0.72	0.66	0.62	0.69	0.65	0.61
4	0.7	0.61	0.55	0.69	0.61	0.54	0.66	0.59	0.53	0.64	0.58	0.53	0.62	0.56	0.52
5	0.63	0.54	0.47	0.62	0.53	0.47	0.59	0.52	0.46	0.57	0.51	0.46	0.56	0.5	0.45
6	0.56	0.47	0.41	0.55	0.47	0.41	0.54	0.46	0.4	0.52	0.45	0.4	0.5	0.44	0.4
7	0.51	0.42	0.36	0.5	0.42	0.36	0.49	0.41	0.36	0.47	0.41	0.35	0.46	0.4	0.35
8	0.47	0.38	0.32	0.46	0.38	0.32	0.45	0.37	0.32	0.43	0.37	0.32	0.42	0.36	0.32
9	0.43	0.35	0.29	0.42	0.34	0.29	0.41	0.34	0.29	0.4	0.33	0.29	0.39	0.33	0.28
10	0.4	0.32	0.26	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.26

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size: 600
Manufactory:	Sur(m ²): 0.241	Protect Angle(Deg):

Wall Exitance CoEfficients

Ceiling(%)		0			0			0			0			0	
Wall (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floor (%)		0			0			0			0			0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.31	0.18	0.06	0.31	0.17	0.06	0.29	0.17	0.05	0.28	0.16	0.05	0.27	0.16	0.05
2	0.29	0.16	0.05	0.29	0.16	0.05	0.28	0.15	0.05	0.26	0.15	0.05	0.25	0.14	0.05
3	0.27	0.14	0.04	0.27	0.14	0.04	0.25	0.14	0.04	0.25	0.13	0.04	0.24	0.13	0.04
4	0.25	0.13	0.04	0.24	0.13	0.04	0.24	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04
5	0.23	0.12	0.03	0.23	0.12	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03
6	0.21	0.11	0.03	0.21	0.11	0.03	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03
7	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03	0.18	0.09	0.03	0.18	0.09	0.03
8	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03	0.17	0.09	0.02
9	0.17	0.08	0.02	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02
10	0.16	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.07	0.02

Ceiling Cavity Exitance CoEfficients

Ceiling(%)		0			0			0			0			0	
Wall (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floor (%)		0			0			0			0			0	
0	0.19	0.19	0.19	0.16	0.16	0.16	0.11	0.11	0.11	0.06	0.06	0.06	0.02	0.02	0.02
1	0.18	0.16	0.13	0.15	0.13	0.12	0.11	0.09	0.08	0.06	0.05	0.05	0.02	0.02	0.02
2	0.17	0.13	0.1	0.15	0.11	0.08	0.1	0.08	0.06	0.06	0.05	0.03	0.02	0.01	0.01
3	0.16	0.11	0.07	0.14	0.1	0.06	0.1	0.07	0.05	0.06	0.04	0.03	0.02	0.01	0.01
4	0.16	0.1	0.06	0.13	0.09	0.05	0.09	0.06	0.04	0.05	0.04	0.02	0.02	0.01	0.01
5	0.15	0.09	0.05	0.13	0.08	0.04	0.09	0.05	0.03	0.05	0.03	0.02	0.02	0.01	0.01
6	0.14	0.08	0.04	0.12	0.07	0.03	0.08	0.05	0.02	0.05	0.03	0.01	0.02	0.01	0
7	0.14	0.08	0.03	0.12	0.07	0.03	0.08	0.05	0.02	0.05	0.03	0.01	0.02	0.01	0
8	0.13	0.07	0.03	0.11	0.06	0.03	0.08	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
9	0.12	0.06	0.03	0.11	0.06	0.02	0.07	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0
10	0.12	0.06	0.02	0.1	0.05	0.02	0.07	0.04	0.01	0.04	0.02	0.01	0.01	0.01	0

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size: 600
Manufactory:	Sur(m ²): 0.241	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	1554	1557	1557	1555	1551	1544	1547	1544	0-5	37.2	37.2
10	1529	1540	1539	1538	1523	1515	1520	1514	5-10	110	147
15	1490	1507	1510	1504	1486	1471	1480	1471	10-15	179	326
20	1437	1461	1465	1458	1432	1415	1426	1415	15-20	241	567
25	1374	1401	1408	1399	1368	1345	1360	1344	20-25	295	862
30	1296	1330	1339	1326	1292	1266	1283	1265	25-30	338	1201
35	1211	1248	1260	1245	1205	1177	1197	1175	30-35	370	1571
40	1117	1156	1169	1150	1109	1076	1100	1074	35-40	389	1960
45	1012	1054	1070	1050	1005	969	994	966	40-45	395	2355
50	901	944	963	942	893	856	881	853	45-50	388	2743
55	783	830	850	828	774	735	760	733	50-55	367	3110
60	662	711	730	707	653	611	640	612	55-60	336	3446
65	538	587	607	583	530	486	513	487	60-65	293	3739
70	413	464	480	460	400	365	388	365	65-70	242	3981
75	292	345	354	342	283	246	264	249	70-75	186	4168
80	180	230	234	228	171	135	147	137	75-80	128	4295
85	81.4	121	120	118	72.4	38.3	41	40.1	80-85	70.5	4366
90	10.8	28.3	30.5	26.3	5.54	5.79	6.07	5.79	85-90	23	4389
95									90-95		
100									95-100		
105									100-105		
110									105-110		
115									110-115		
120									115-120		
125									120-125		
130									125-130		
135									130-135		
140									135-140		
145									140-145		
150									145-150		
155									150-155		
160									155-160		
165									160-165		
170									165-170		
175									170-175		
180									175-180		

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size: 600
Manufactory:	Sur(m ²): 0.241	Protect Angle(Deg):

CD Table

Gm\C(Deg)	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340
5.0	1554	1555	1557	1557	1557	1557	1555	1554	1553	1551	1548	1544	1545	1546	1546	1545	1545	1549
10.0	1529	1534	1539	1540	1539	1539	1538	1536	1529	1523	1519	1516	1517	1519	1519	1516	1516	1523
15.0	1490	1498	1505	1508	1509	1509	1506	1502	1494	1486	1479	1473	1474	1478	1478	1474	1473	1482
20.0	1437	1448	1459	1462	1464	1463	1460	1455	1443	1432	1425	1417	1419	1424	1424	1418	1417	1427
25.0	1374	1386	1398	1403	1406	1406	1402	1396	1382	1368	1358	1348	1350	1356	1356	1349	1347	1361
30.0	1296	1311	1327	1333	1337	1336	1331	1323	1307	1292	1281	1268	1271	1279	1279	1271	1268	1282
35.0	1211	1227	1244	1252	1257	1256	1250	1240	1223	1205	1193	1180	1183	1192	1192	1182	1179	1195
40.0	1117	1134	1151	1160	1166	1165	1157	1146	1127	1109	1095	1079	1084	1095	1095	1083	1079	1098
45.0	1012	1030	1049	1059	1067	1066	1056	1045	1024	1005	989	973	977	988	988	975	971	992
50.0	901	920	939	950	959	958	949	937	914	893	877	860	864	876	875	862	858	880
55.0	783	804	825	837	846	845	835	822	797	774	757	739	743	755	754	742	739	761
60.0	662	683	706	717	726	725	715	701	677	653	635	616	621	634	634	621	617	640
65.0	538	560	582	594	603	602	591	577	553	530	511	491	495	507	507	495	492	516
70.0	413	435	459	470	477	476	467	453	426	400	385	369	372	383	383	372	370	392
75.0	292	315	339	348	352	352	346	336	309	283	267	250	252	260	261	254	254	273
80.0	180	202	224	231	233	233	230	222	196	171	155	139	139	144	144	140	142	161
85.0	81.4	98.8	117	121	120	119	119	113	92.4	72.4	57.5	42	39.2	40.4	40.8	40.4	44.7	63.3
90.0	10.8	18.4	26.4	29	30	29.5	27.6	24	14.6	5.54	5.65	5.77	5.88	6.01	6.01	5.88	6.34	8.59
95.0																		
100.0																		
105.0																		
110.0																		
115.0																		
120.0																		
125.0																		
130.0																		
135.0																		
140.0																		
145.0																		
150.0																		
155.0																		
160.0																		
165.0																		
170.0																		
175.0																		
180.0																		

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 231.1V I: 179.0mA P: 40.93W PF: 0.985 Test LM: 4388.99lm		
Lamp Name: D600 4000k	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size: 600
Manufactory:	Sur(m ²): 0.241	Protect Angle(Deg):

UGR

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	18.7	20.1	19.0	20.3	20.5	19.0	20.4	19.2	20.5	20.7
3H	19.6	20.8	19.8	21.0	21.3	19.9	21.2	20.2	21.4	21.6
4H	19.9	21.1	20.2	21.4	21.6	20.4	21.6	20.7	21.8	22.1
6H	20.2	21.4	20.5	21.6	21.9	20.8	21.9	21.1	22.2	22.4
8H	20.3	21.4	20.6	21.7	21.9	20.9	22.0	21.2	22.3	22.6
12H	20.4	21.4	20.7	21.7	22.0	21.1	22.1	21.4	22.4	22.7
4H 2H	19.1	20.2	19.4	20.5	20.7	19.3	20.4	19.6	20.7	20.9
3H	20.2	21.1	20.5	21.4	21.7	20.5	21.4	20.8	21.7	22.0
4H	20.7	21.6	21.0	21.9	22.2	21.1	22.0	21.4	22.3	22.6
6H	21.1	21.9	21.5	22.2	22.6	21.6	22.4	22.0	22.8	23.1
8H	21.3	22.0	21.7	22.4	22.7	21.9	22.6	22.2	22.9	23.3
12H	21.4	22.1	21.8	22.4	22.8	22.0	22.7	22.4	23.1	23.5
8H 4H	22.1	22.7	22.5	23.1	23.5	22.4	23.1	22.9	23.5	23.9
6H	22.7	23.3	23.1	23.7	24.1	23.2	23.8	23.6	24.2	24.6
8H	23.0	23.5	23.4	23.9	24.4	23.5	24.1	24.0	24.5	24.9
12H	23.2	23.6	23.6	24.1	24.5	23.8	24.3	24.3	24.7	25.2
12H 4H	22.1	22.7	22.5	23.1	23.5	22.4	23.0	22.9	23.4	23.9
6H	22.8	23.3	23.2	23.7	24.2	23.3	23.7	23.7	24.2	24.6
8H	23.1	23.5	23.6	24.0	24.5	23.6	24.1	24.1	24.5	25.0
Variations with the observer position at spacings:										
S = 1.0H	0.4/-0.5					0.3/-0.4				
1.5H	0.5/-0.5					0.4/-0.4				
2.0H	0.1/-0.3					0.1/-0.3				

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.970

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark: