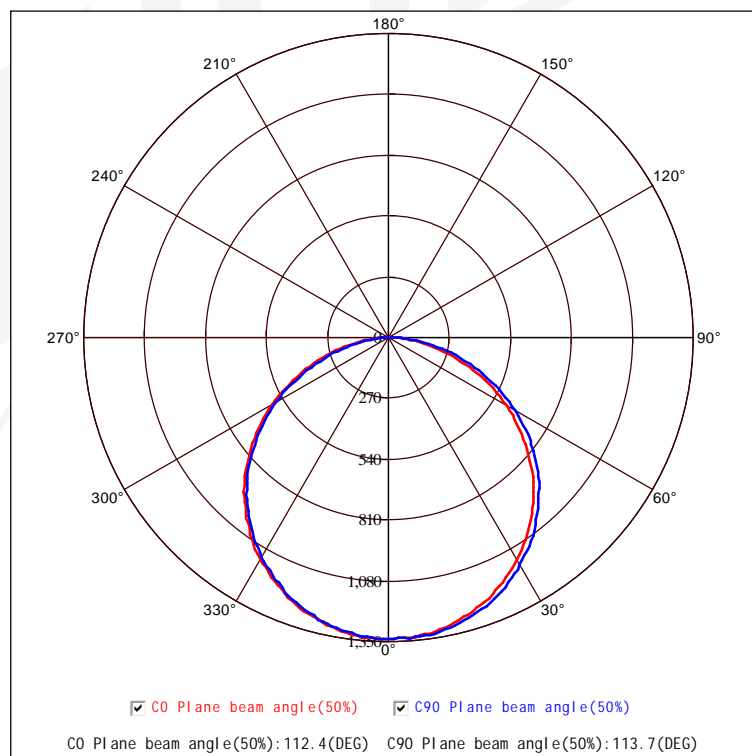


## Goniophotometer Test Report

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm						
Lamp Name: 0606			Lamp Type:		Weight(kg):	
Lamp ID:			Lamp Spec:		Shape Size:	
Manufactory:			Sur(m^2): 0.306		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model			Peak Value(cd)	1344.1	Effici ency(lm/w)	103.5
Nominal P(w)	1.0		Position	22.5, 3.0	UP(C0-C180)	0.0
Rated Volt(v)	230.0		Total Flux(lm)	3835.559	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): 1

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): 22.5

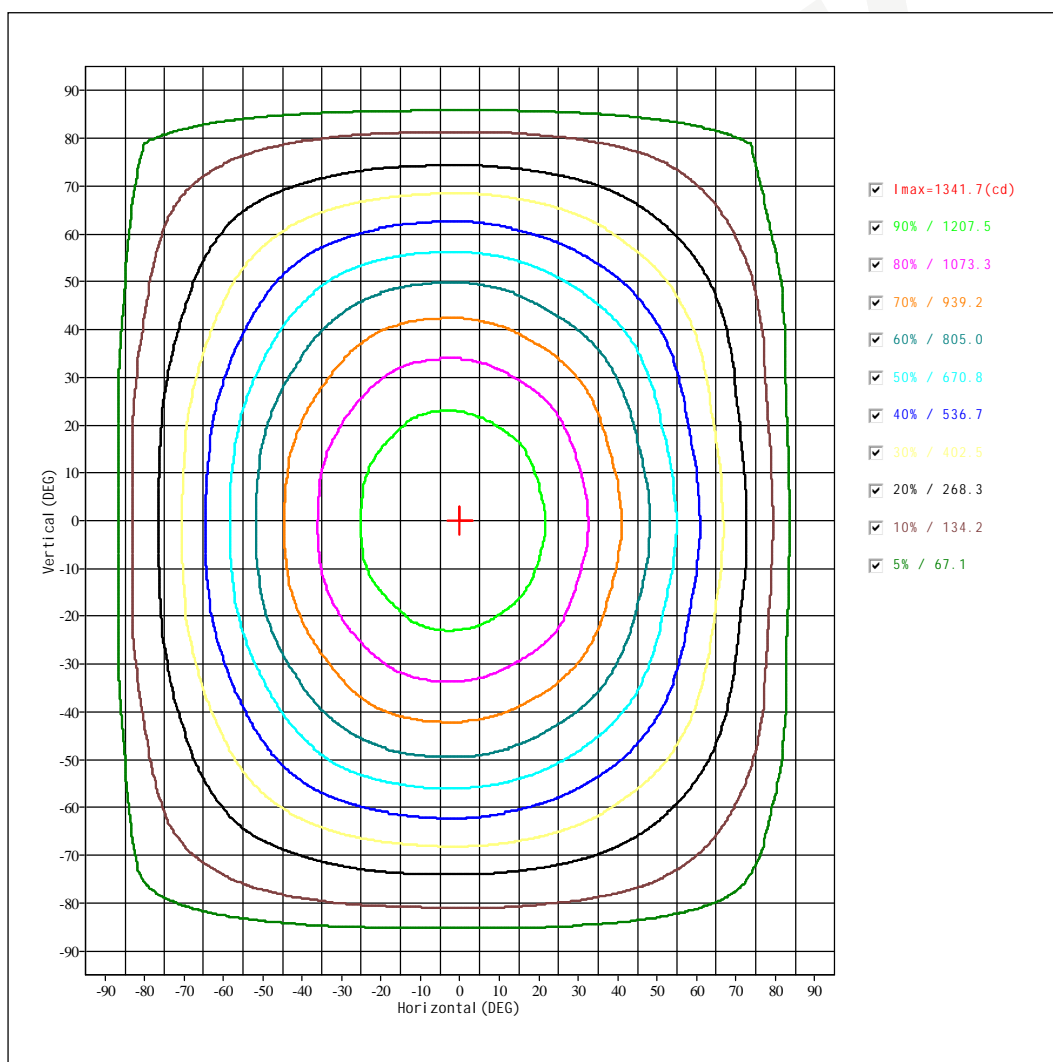
Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.306	Protect Angle(Deg):

Planar IsoCandela Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

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): 22.5

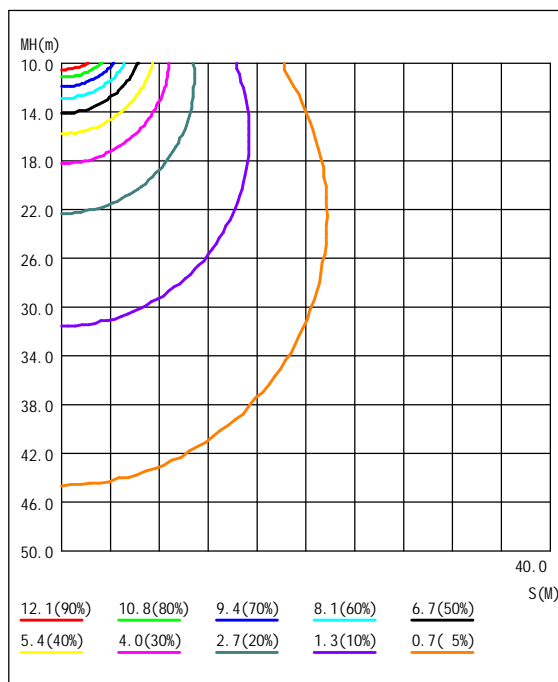
Humidity(%): 60

Date: 2020-05-11

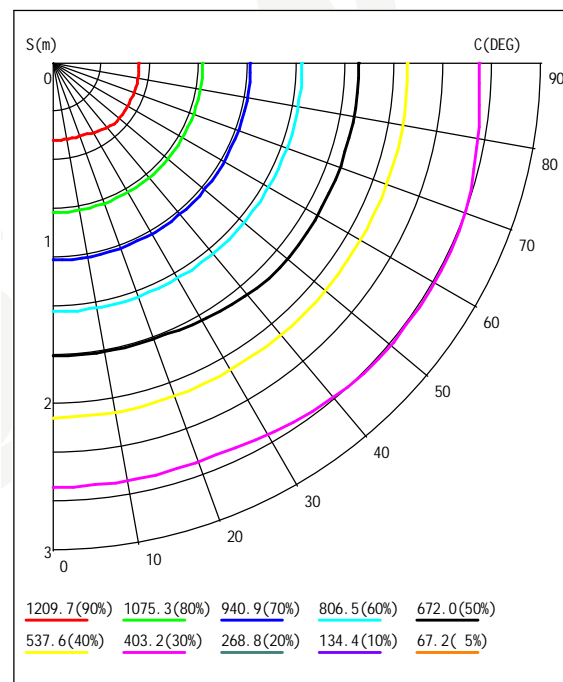
Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.306	Protect Angle(Deg):

Spacial ISOLUX Curve



Planar ISOLUX Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

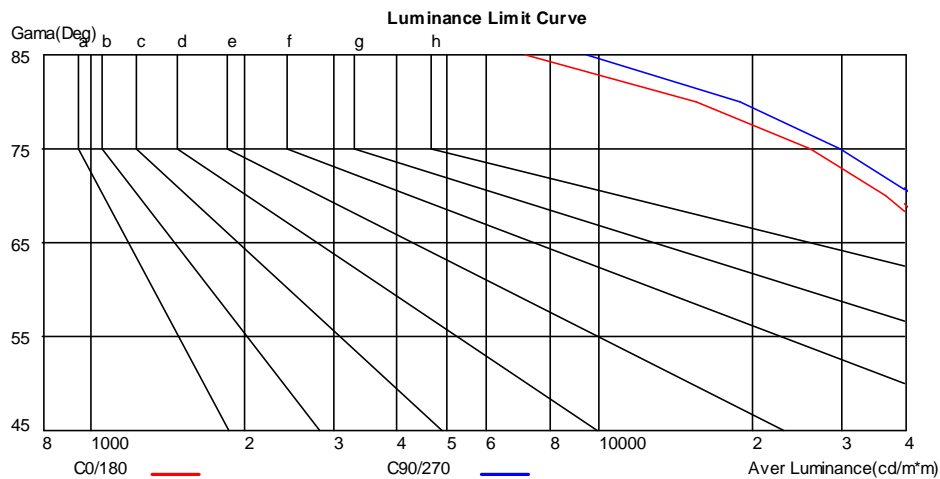
Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.306	Protect Angle(Deg):

## Luminance Limit Curve

Aver Luminance(cd/m²)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	89550.6	79973.3	69988.1	59311.8	47929.8	36707.1	26118.4	15512.1	7177.9
C90	93859.2	84230.5	74005.5	63910.9	53031.0	41568.5	29953.2	18916.4	9409.9

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): 1

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): 22.5

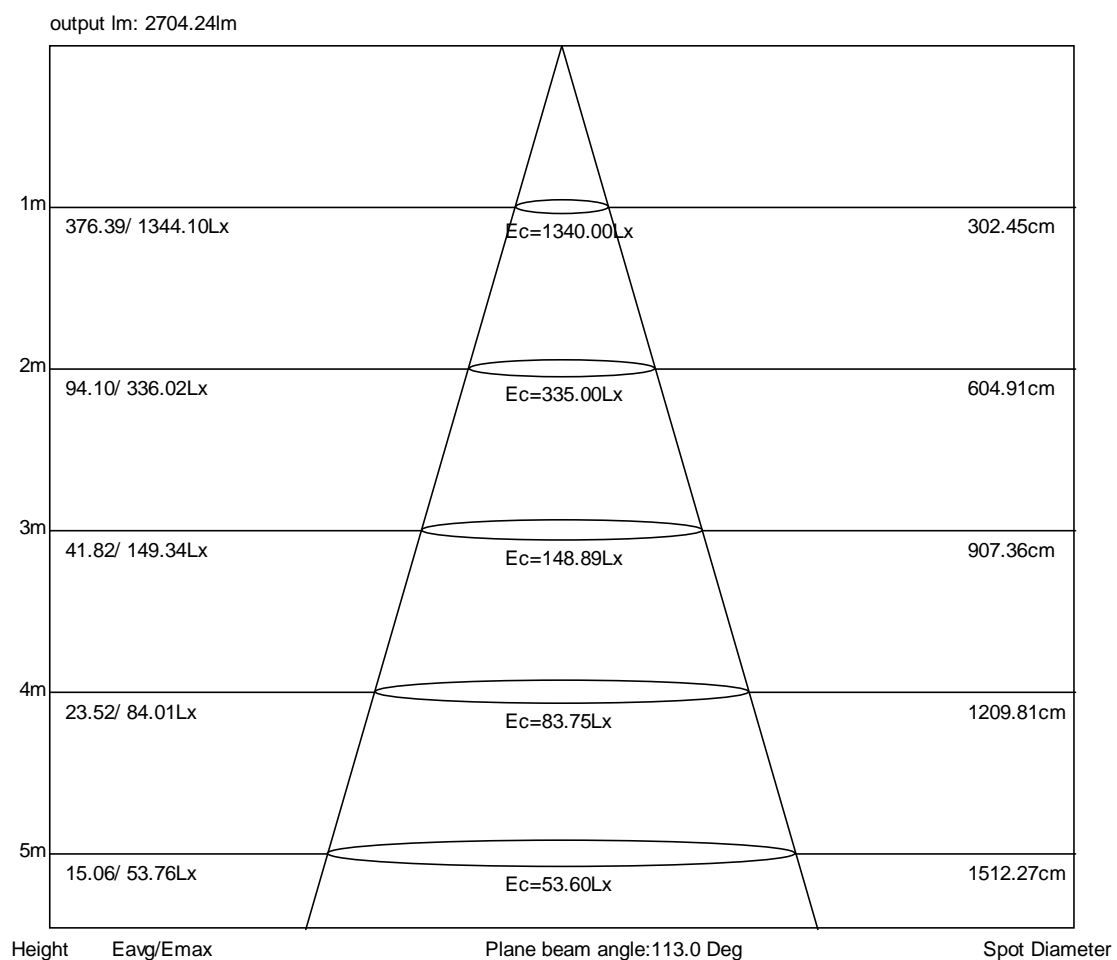
Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.306	Protect Angle(Deg):

## Average Illumination



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

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): 22.5

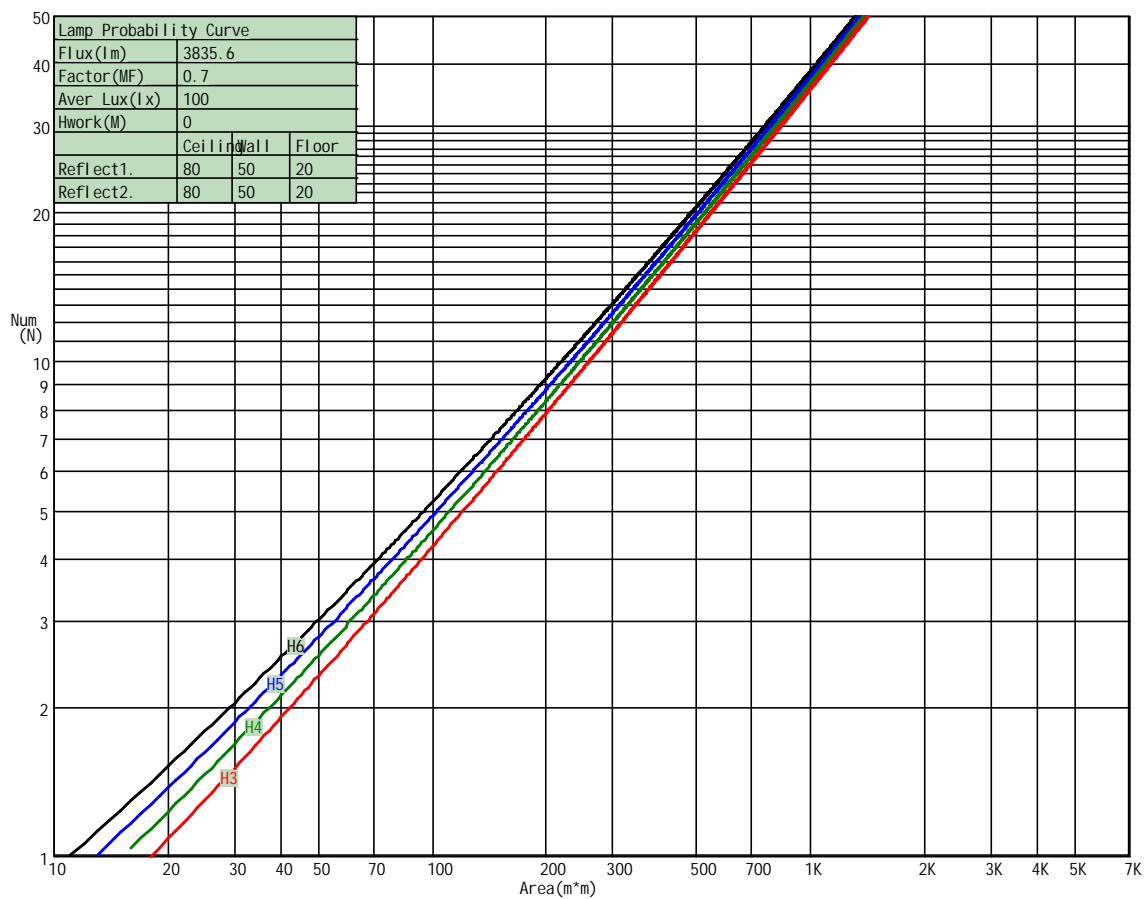
Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m <sup>2</sup> ): 0.306	Protect Angle(Deg):

Lamp Probability Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.306	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	44	31	55	41	30
1.50	65	47	33	62	45	32	56	41	30
2.00	68	49	34	64	47	33	57	42	30
2.50	69	50	34	65	47	32	58	43	30
3.00	70	50	34	66	48	32	58	43	29
4.00	71	51	34	67	49	32	58	43	29
5.00	72	52	34	68	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	0.96	1.01	0.98	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	0.6
4	0.7	0.61	0.54	0.69	0.6	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	0.61	0.53	0.47	0.59	0.52	0.46	0.57	0.51	0.46	0.55	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	0.4	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	0.31
9	0.43	0.34	0.29	0.42	0.34	0.29	0.41	0.34	0.29	0.4	0.33	0.28	0.39	0.33	0.28
10	0.39	0.31	0.26	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.3	0.26	0.36	0.3	0.26

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.306	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	0.26	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	0.13	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	0.02	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): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

Remark:



Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m <sup>2</sup> ): 0.306	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	1333	1335	1330	1330	1332	1334	1333	1334	0-5	31.9	31.9
10	1315	1317	1318	1316	1311	1309	1307	1303	5-10	94.7	127
15	1283	1294	1297	1286	1284	1274	1272	1272	10-15	154	281
20	1244	1258	1268	1257	1243	1233	1234	1228	15-20	208	489
25	1192	1203	1217	1208	1190	1179	1181	1183	20-25	256	745
30	1131	1146	1154	1142	1128	1116	1120	1118	25-30	294	1039
35	1063	1076	1094	1074	1056	1044	1044	1038	30-35	323	1362
40	982	1001	1017	1003	979	959	960	957	35-40	341	1703
45	896	918	939	916	893	869	875	873	40-45	347	2050
50	800	818	842	822	793	771	775	774	45-50	342	2392
55	700	721	740	717	692	668	674	670	50-55	325	2717
60	593	612	639	611	584	559	561	557	55-60	297	3014
65	479	503	530	502	474	446	446	445	60-65	259	3273
70	367	392	416	390	360	332	332	337	65-70	213	3486
75	261	280	300	280	250	228	218	229	70-75	161	3647
80	155	177	189	177	149	130	122	131	75-80	109	3756
85	71.8	87.9	94.1	86.9	66	49.8	42.7	47.5	80-85	59.5	3815
90	12.9	23.1	26.7	22.8	8.83	9.54	10	9.99	85-90	20.6	3836
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): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m^2): 0.306	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	1333	1332	1334	1333	1331	1333	1335	1331	1333	1332	1330	1333	1331	1332	1331	1330	1332	1328
10.0	1315	1315	1317	1322	1321	1321	1321	1317	1321	1311	1303	1307	1305	1305	1305	1303	1304	1307
15.0	1283	1294	1294	1297	1297	1298	1295	1288	1290	1284	1276	1274	1271	1271	1271	1270	1273	1277
20.0	1244	1254	1258	1265	1268	1268	1264	1256	1250	1243	1228	1231	1225	1228	1229	1225	1228	1233
25.0	1192	1210	1205	1215	1219	1218	1216	1207	1203	1190	1182	1179	1175	1177	1175	1173	1181	1177
30.0	1131	1145	1146	1155	1156	1157	1154	1143	1142	1128	1114	1115	1110	1114	1113	1109	1117	1113
35.0	1063	1074	1076	1088	1094	1095	1088	1075	1076	1056	1037	1042	1033	1037	1037	1031	1038	1041
40.0	982	1004	1002	1013	1018	1019	1016	1002	997	979	958	958	950	953	954	949	958	965
45.0	896	919	919	931	939	939	931	916	911	893	867	868	860	866	865	859	872	871
50.0	800	826	820	837	844	844	838	822	818	793	773	771	762	767	765	760	773	771
55.0	700	721	722	735	741	742	735	718	718	692	668	667	656	663	663	656	669	669
60.0	593	614	613	629	639	640	631	612	611	584	556	557	545	551	550	544	557	560
65.0	479	506	505	522	531	530	520	503	500	474	445	445	432	436	437	432	445	449
70.0	367	393	393	409	416	417	408	390	388	360	332	331	320	324	323	320	336	336
75.0	261	281	281	299	303	302	297	279	275	250	224	227	213	212	212	213	227	226
80.0	155	177	177	192	194	194	192	177	173	149	127	129	117	117	117	117	130	129
85.0	71.8	89.5	88.8	98.9	98.7	98.8	98.6	87.4	86.3	66	48.4	49	40.9	39.8	39.6	39.8	47	48.4
90.0	12.9	19.4	22.5	27	27.7	27.9	27.2	22.2	18.6	8.83	8.98	9.42	9.75	9.95	9.96	9.94	9.97	10.3
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): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 166.0mA P: 37.06W PF: 0.967 Test LM: 3835.56lm		
Lamp Name: 0606	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m^2): 0.306	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	17.7	19.0	17.9	19.2	19.4	17.8	19.2	18.1	19.4	19.6
3H	18.5	19.8	18.8	20.0	20.2	18.8	20.0	19.0	20.3	20.5
4H	18.9	20.1	19.2	20.3	20.6	19.2	20.4	19.5	20.7	20.9
6H	19.2	20.3	19.5	20.5	20.8	19.6	20.7	19.9	21.0	21.2
8H	19.3	20.4	19.6	20.6	20.9	19.7	20.8	20.0	21.1	21.3
12H	19.3	20.4	19.6	20.6	20.9	19.8	20.9	20.1	21.1	21.4
4H 2H	18.0	19.1	18.3	19.4	19.6	18.2	19.3	18.5	19.5	19.8
3H	19.1	20.1	19.4	20.3	20.6	19.3	20.3	19.6	20.6	20.9
4H	19.6	20.5	20.0	20.8	21.1	19.9	20.8	20.3	21.1	21.4
6H	20.0	20.8	20.4	21.2	21.5	20.4	21.2	20.8	21.5	21.9
8H	20.2	20.9	20.6	21.3	21.6	20.6	21.4	21.0	21.7	22.1
12H	20.3	21.0	20.7	21.4	21.7	20.8	21.5	21.2	21.8	22.2
8H 4H	20.9	21.6	21.3	22.0	22.4	21.2	21.9	21.6	22.2	22.7
6H	21.5	22.1	21.9	22.5	22.9	21.9	22.5	22.3	22.9	23.3
8H	21.8	22.3	22.2	22.7	23.2	22.2	22.7	22.7	23.2	23.6
12H	22.0	22.5	22.5	22.9	23.4	22.5	22.9	22.9	23.4	23.9
12H 4H	20.9	21.5	21.3	21.9	22.3	21.2	21.8	21.6	22.2	22.6
6H	21.6	22.0	22.0	22.5	23.0	21.9	22.4	22.4	22.8	23.3
8H	21.9	22.3	22.4	22.8	23.2	22.3	22.7	22.8	23.2	23.7
Variations with the observer position at spacings:										
S = 1.0H	0.4/-0.5					0.4/-0.4				
1.5H	0.5/-0.5					0.4/-0.4				
2.0H	0.2/-0.4					0.2/-0.3				

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

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): 22.5

Humidity(%): 60

Date: 2020-05-11

Remark: