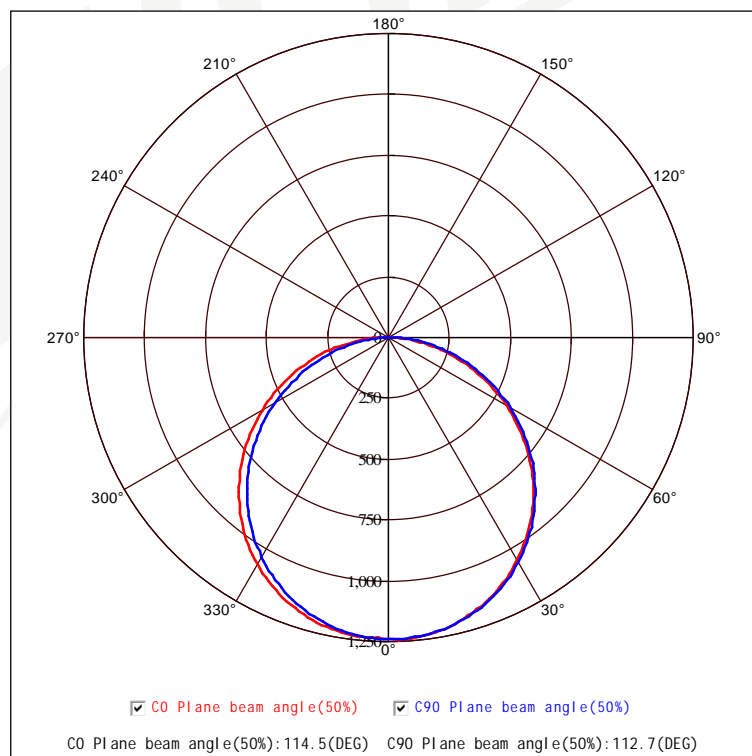


Goniophotometer Test Report

Measured Para U: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm						
Lamp Name: 30W			Lamp Type:		Weight(kg):	
Lamp ID:			Lamp Spec:		Shape Size: 620*620	
Manufactory:			Sur(m^2): 0.306		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model			Peak Value(cd)	1244.5	Efficiency(lm/w)	123.5
Nominal P(w)	30.0		Position	0.0, 1.0	UP(C0-C180)	0.0
Rated Volt(v)	230.0		Total Flux(lm)	3615.924	Down(C0-C180)	51.5
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)	48.5

Planar Intensity Distribution Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

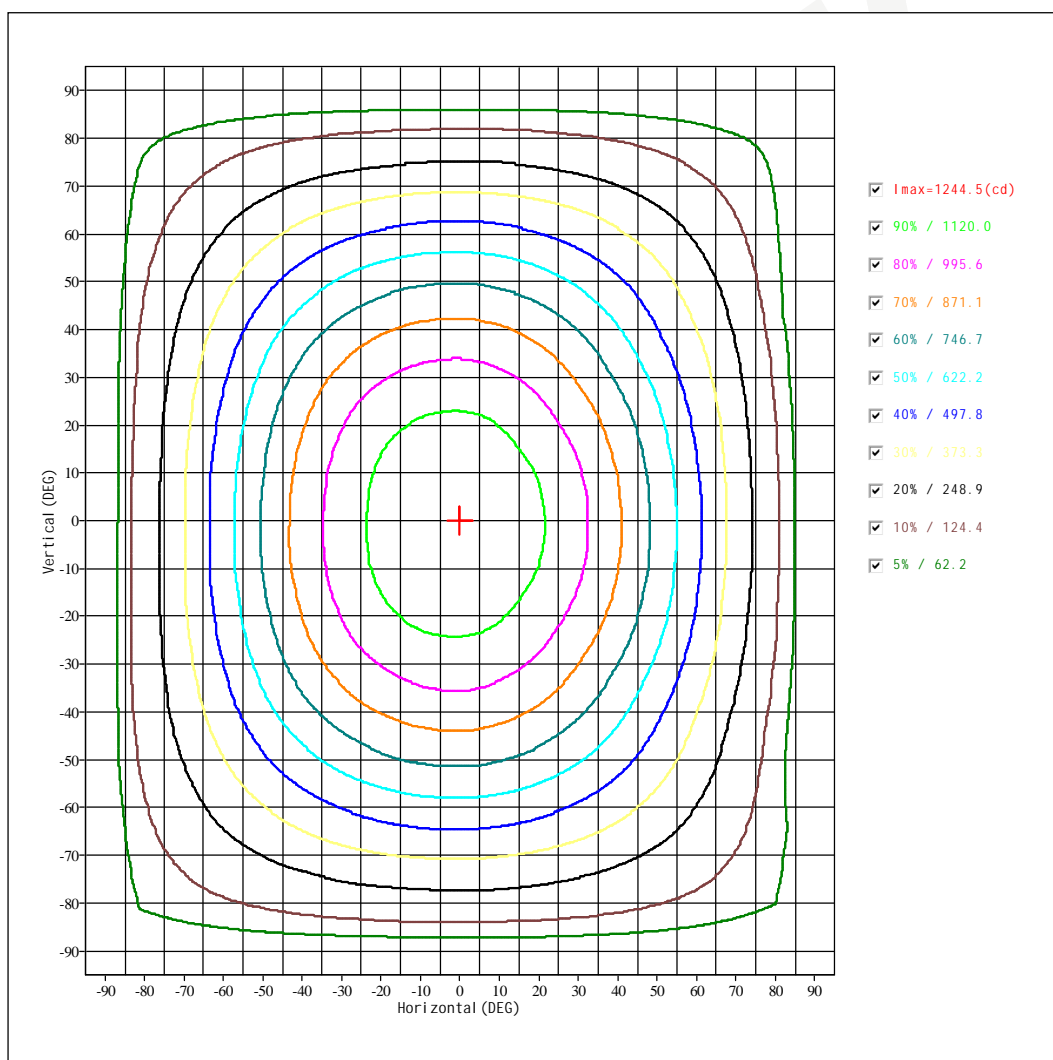
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size: 620*620
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): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

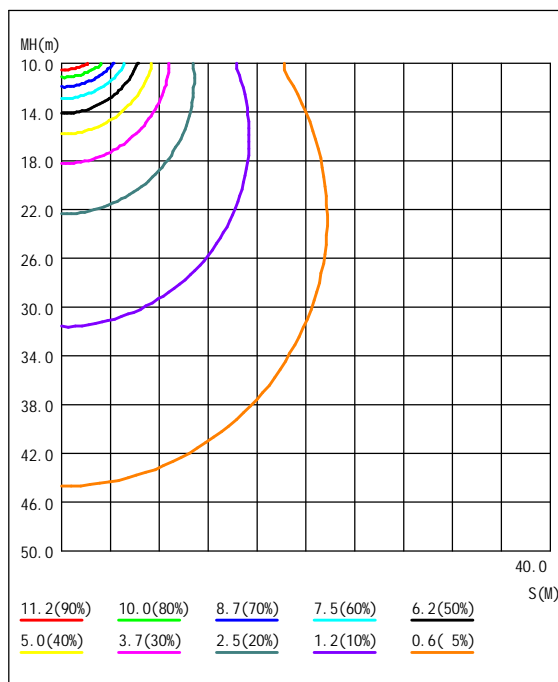
Humidity(%): 60

Date: 2020-04-15

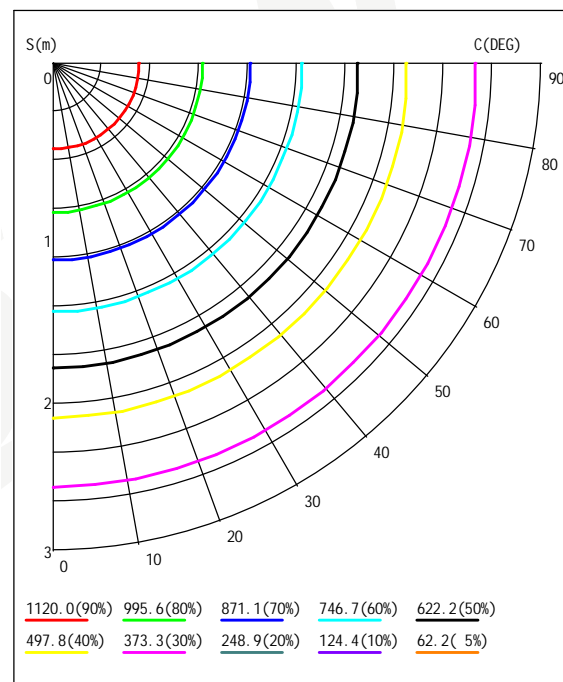
Remark:

Measured Para U: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 620*620
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): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

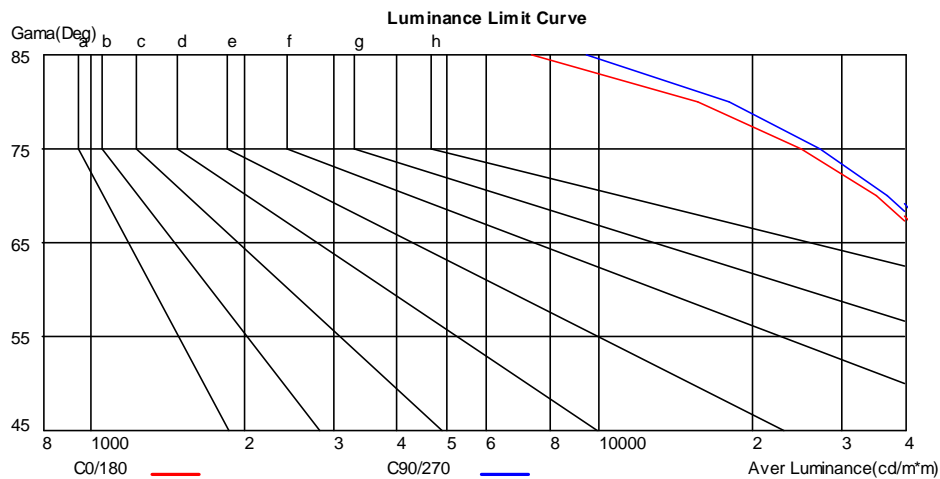
Remark:

Measured Para U: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 620*620
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	82935.0	74224.0	64814.0	55076.0	44924.0	35106.0	24971.0	15689.0	7376.0
C90	84391.0	75548.0	66342.0	56859.0	46889.0	36948.0	27171.0	18011.0	9428.0

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



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

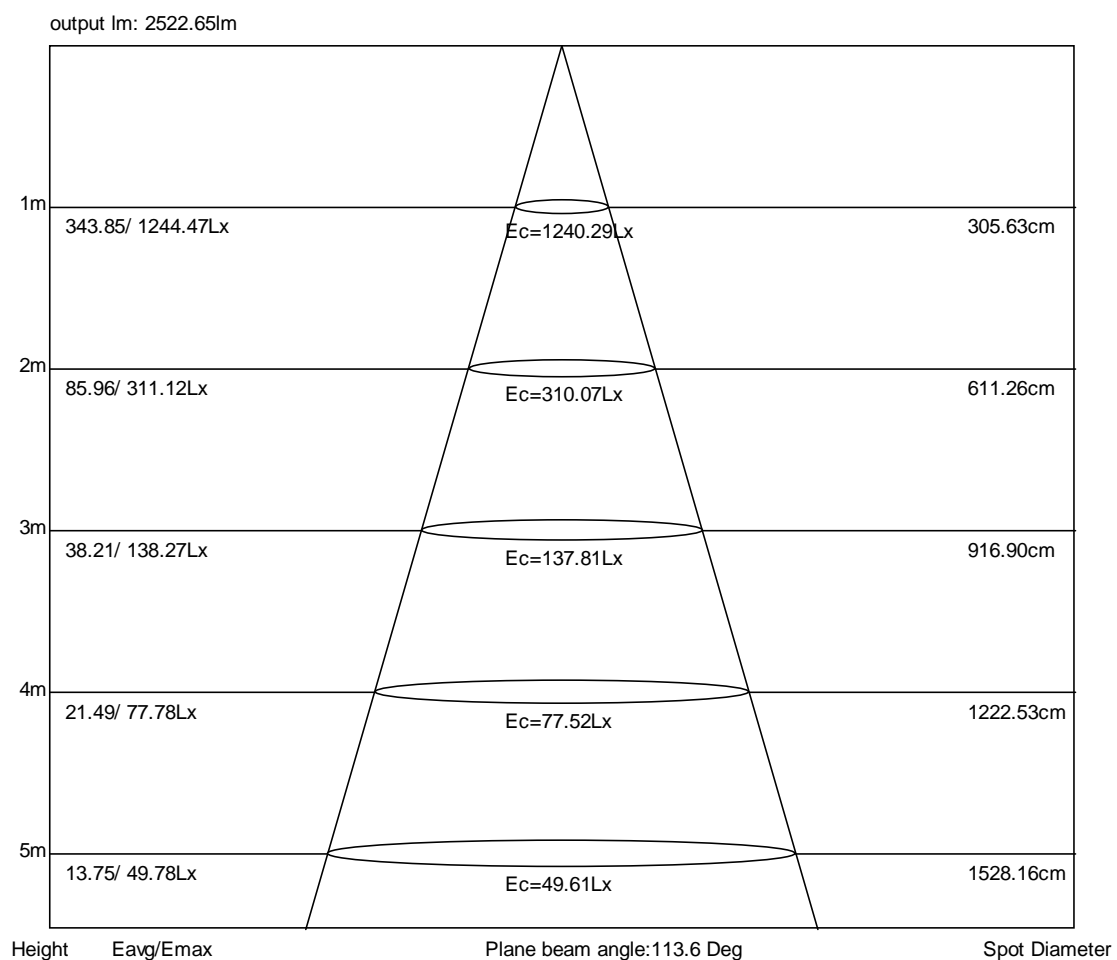
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 620*620
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): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

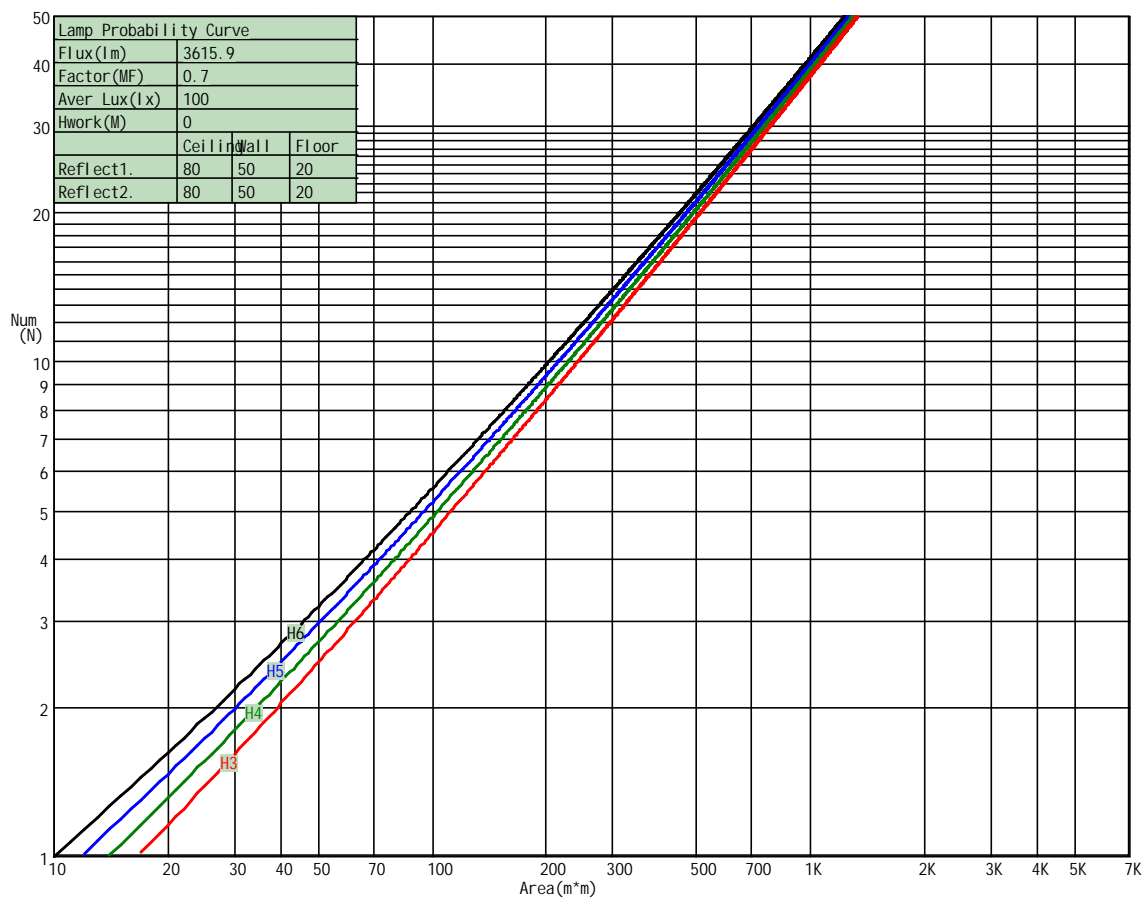
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 620*620
Manufactory:	Sur(m^2): 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): 8.97

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: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 620*620
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	52	38	28	51	37	28	48	36	27
0.80	57	41	30	55	40	29	51	38	28
1.00	60	43	31	58	42	30	53	39	29
1.25	63	45	32	60	43	31	54	40	30
1.50	65	46	32	62	45	32	56	41	30
2.00	68	49	34	64	46	32	57	42	30
2.50	69	50	34	65	47	32	58	42	30
3.00	70	50	34	66	48	32	58	43	29
4.00	72	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	1.03	0.99	0.95	1.01	0.97	0.93	0.97	0.93	0.9	0.93	0.9	0.88	0.89	0.87	0.85
2	0.9	0.83	0.77	0.88	0.81	0.76	0.84	0.79	0.74	0.81	0.76	0.72	0.78	0.74	0.71
3	0.79	0.7	0.64	0.77	0.69	0.63	0.74	0.67	0.62	0.71	0.66	0.61	0.69	0.64	0.6
4	0.7	0.61	0.54	0.68	0.6	0.53	0.66	0.58	0.53	0.63	0.57	0.52	0.61	0.56	0.51
5	0.62	0.53	0.46	0.61	0.52	0.46	0.59	0.51	0.45	0.57	0.5	0.45	0.55	0.49	0.44
6	0.56	0.47	0.4	0.55	0.46	0.4	0.53	0.45	0.4	0.51	0.45	0.39	0.5	0.44	0.39
7	0.51	0.42	0.36	0.5	0.41	0.35	0.48	0.41	0.35	0.47	0.4	0.35	0.45	0.39	0.35
8	0.46	0.38	0.32	0.45	0.37	0.32	0.44	0.37	0.31	0.43	0.36	0.31	0.42	0.36	0.31
9	0.42	0.34	0.28	0.42	0.34	0.28	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.28
10	0.39	0.31	0.26	0.39	0.31	0.26	0.38	0.3	0.26	0.37	0.3	0.25	0.36	0.3	0.25

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

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: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze: 620*620
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	0.32	0.18	0.06	0.31	0.18	0.06	0.3	0.17	0.05	0.29	0.17	0.05	0.28	0.16	0.05
2	0.3	0.16	0.05	0.29	0.16	0.05	0.28	0.16	0.05	0.27	0.15	0.05	0.26	0.15	0.05
3	0.27	0.15	0.04	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04
4	0.25	0.13	0.04	0.25	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	0.21	0.11	0.03
6	0.22	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	0.03
9	0.18	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	0.11	0.11	0.09	0.08	0.06	0.05	0.05	0.02	0.02	0.01
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	0.17	0.11	0.07	0.14	0.1	0.06	0.1	0.07	0.04	0.06	0.04	0.03	0.02	0.01	0.01
4	0.16	0.1	0.06	0.14	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	0.03	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): 8.97

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: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size: 620*620
Manufactory:	Sur(m ²): 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	1237	1238	1236	1237	1235	1233	1231	1228	0-5	29.6	29.6
10	1221	1223	1221	1225	1223	1213	1213	1208	5-10	87.7	117
15	1192	1198	1195	1202	1200	1183	1184	1177	10-15	143	260
20	1155	1162	1160	1169	1166	1144	1144	1135	15-20	193	453
25	1108	1118	1113	1125	1122	1090	1093	1082	20-25	237	691
30	1051	1062	1060	1073	1069	1034	1035	1022	25-30	273	964
35	985	999	996	1010	1008	965	967	953	30-35	300	1263
40	911	927	923	941	937	890	892	876	35-40	317	1580
45	829	848	844	862	858	807	808	791	40-45	323	1903
50	742	760	755	775	775	718	719	701	45-50	318	2221
55	648	670	663	684	683	624	625	606	50-55	303	2524
60	551	572	569	590	588	523	526	508	55-60	278	2802
65	449	473	469	492	490	423	426	410	60-65	245	3047
70	351	372	369	394	389	322	328	335	65-70	205	3252
75	250	272	272	292	292	225	232	229	70-75	161	3413
80	157	178	180	203	197	134	143	126	75-80	113	3525
85	73.8	94.7	94.3	115	106	53.5	61.1	45	80-85	66.5	3592
90	10.3	19.7	23.8	33.2	31.5	5.25	5.88	5.83	85-90	24.1	3616
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): 8.97

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: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size: 620*620
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	1237	1237	1238	1237	1236	1236	1237	1237	1236	1235	1234	1233	1233	1232	1231	1229	1229	1233
10.0	1221	1222	1223	1223	1222	1222	1224	1225	1224	1223	1219	1214	1213	1213	1212	1210	1209	1215
15.0	1192	1195	1197	1197	1196	1196	1199	1201	1200	1200	1192	1185	1183	1184	1182	1179	1178	1185
20.0	1155	1158	1162	1162	1161	1162	1166	1168	1167	1166	1156	1146	1144	1144	1142	1138	1137	1146
25.0	1108	1112	1117	1116	1114	1116	1121	1124	1123	1122	1108	1094	1091	1092	1091	1086	1085	1096
30.0	1051	1056	1061	1061	1060	1063	1069	1073	1071	1069	1054	1038	1034	1034	1032	1026	1026	1038
35.0	985	991	997	998	996	999	1005	1010	1009	1008	989	970	966	967	964	958	956	971
40.0	911	918	925	926	924	927	935	941	939	937	917	895	891	891	888	881	880	896
45.0	829	838	846	847	845	848	856	862	860	858	836	813	808	808	804	797	795	813
50.0	742	750	758	759	756	760	769	775	775	775	750	724	718	719	715	707	706	724
55.0	648	658	667	668	665	668	677	684	683	683	657	630	624	625	621	612	610	630
60.0	551	560	570	571	569	573	583	589	589	588	560	530	524	526	522	514	512	532
65.0	449	460	471	472	470	474	484	492	491	490	461	431	424	426	423	415	414	432
70.0	351	360	370	371	370	375	386	394	391	389	360	329	324	327	329	332	336	344
75.0	250	260	270	272	272	276	286	292	292	292	263	233	228	230	231	230	231	241
80.0	157	166	176	179	180	185	196	203	200	197	170	141	137	141	139	131	129	143
85.0	73.8	82.9	92.4	94.5	94.4	98.8	108	114	110	106	83.2	59.3	56	59.4	57.6	50.3	48.1	61.2
90.0	10.3	14.4	18.6	21	22.9	25.9	30.1	33	32.3	31.5	20	8.12	5.46	5.74	5.87	5.85	6.32	8.34
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): 8.97

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: 230.6V I: 134.0mA P: 29.28W PF: 0.945 Test LM: 3615.92lm		
Lamp Name: 30W	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size: 620*620
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	17.3	18.7	17.6	18.9	19.1	17.4	18.8	17.6	19.0	19.1
3H	18.2	19.5	18.4	19.7	19.9	18.3	19.6	18.6	19.8	20.0
4H	18.6	19.8	18.9	20.0	20.3	18.7	20.0	19.0	20.2	20.4
6H	18.9	20.0	19.2	20.3	20.5	19.1	20.3	19.4	20.5	20.8
8H	19.0	20.1	19.3	20.4	20.6	19.3	20.4	19.6	20.6	20.9
12H	19.1	20.1	19.4	20.4	20.7	19.4	20.5	19.7	20.7	21.0
4H 2H	17.7	18.8	18.0	19.0	19.3	17.7	18.8	18.0	19.1	19.4
3H	18.7	19.7	19.1	20.0	20.3	18.9	19.8	19.2	20.1	20.4
4H	19.3	20.2	19.6	20.5	20.8	19.4	20.3	19.8	20.6	21.0
6H	19.7	20.6	20.1	20.9	21.2	20.0	20.8	20.3	21.1	21.5
8H	19.9	20.7	20.3	21.0	21.4	20.2	21.0	20.6	21.3	21.7
12H	20.1	20.8	20.5	21.1	21.5	20.4	21.1	20.8	21.4	21.8
8H 4H	20.6	21.3	21.0	21.7	22.1	20.7	21.4	21.1	21.8	22.2
6H	21.2	21.8	21.7	22.2	22.7	21.4	22.0	21.9	22.4	22.9
8H	21.5	22.0	22.0	22.5	22.9	21.8	22.3	22.2	22.7	23.2
12H	21.7	22.2	22.2	22.7	23.1	22.1	22.6	22.6	23.0	23.5
12H 4H	20.6	21.2	21.0	21.6	22.0	20.7	21.3	21.2	21.7	22.2
6H	21.3	21.8	21.8	22.2	22.7	21.5	22.0	22.0	22.4	22.9
8H	21.6	22.1	22.1	22.5	23.0	21.9	22.3	22.4	22.8	23.3
Variations with the observer position at spacings:										
S = 1.0H	0.4/-0.4					0.3/-0.4				
1.5H	0.5/-0.4					0.4/-0.4				
2.0H	0.1/-0.3					0.1/-0.3				

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 1

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark: