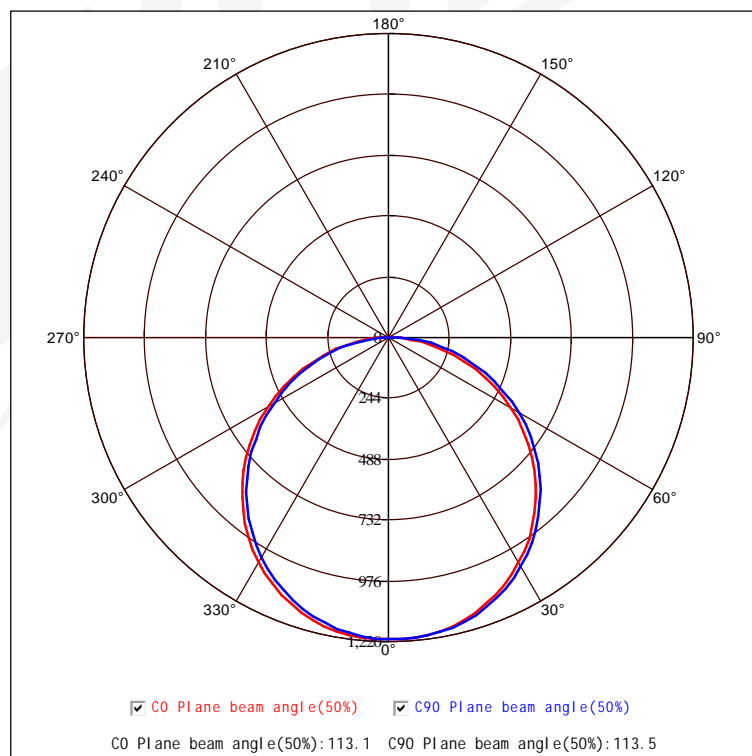


Goniophotometer Test Report

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm						
Lamp Name: 1203			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)	1213.1	Effici ency(lm/w)	118.0
Nominal P(w)	1.0		Position	180.0, 2.5	UP(C0-C180)	0.0
Rated Volt(v)	230.0		Total Flux(lm)	3515.786	Down(C0-C180)	52.2
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)	47.8

Planar Intensity Distribution Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

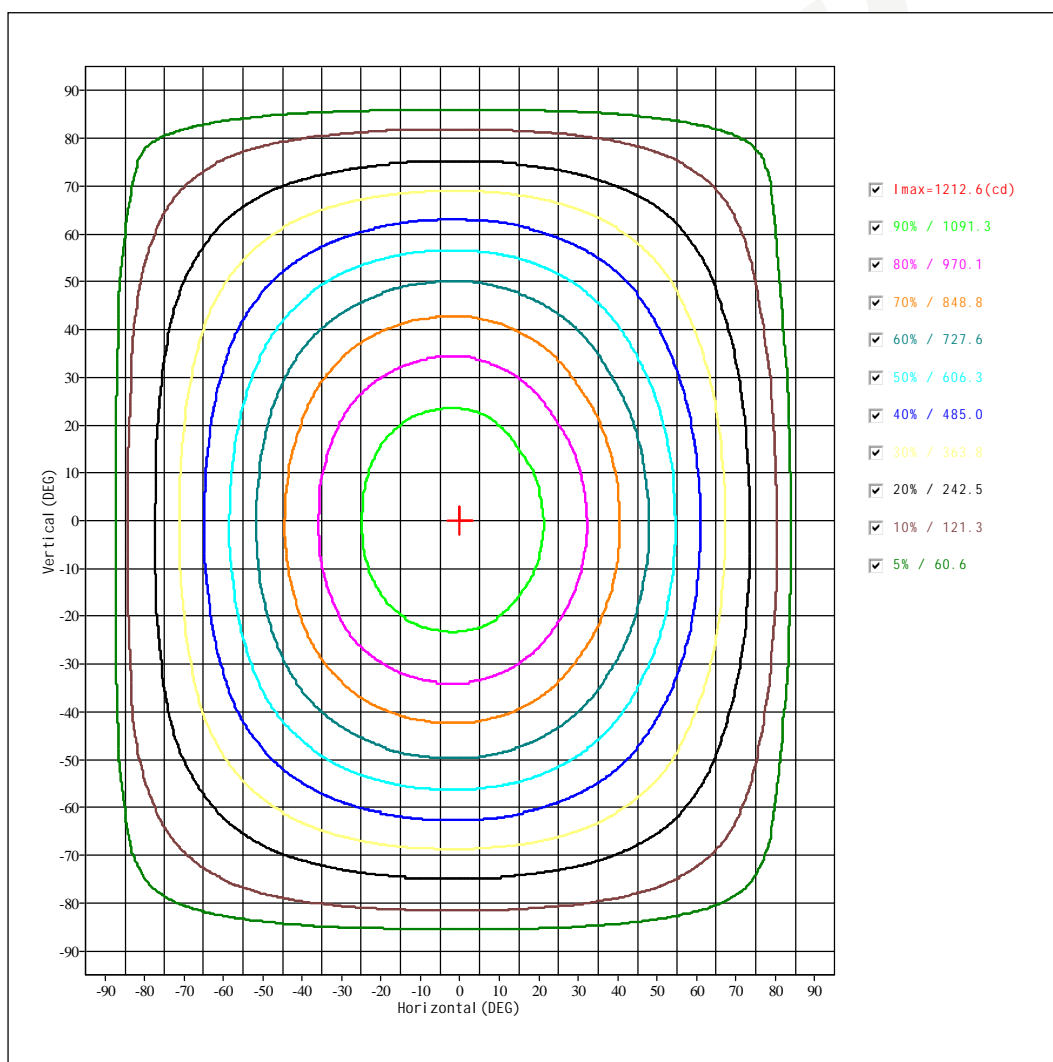
Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

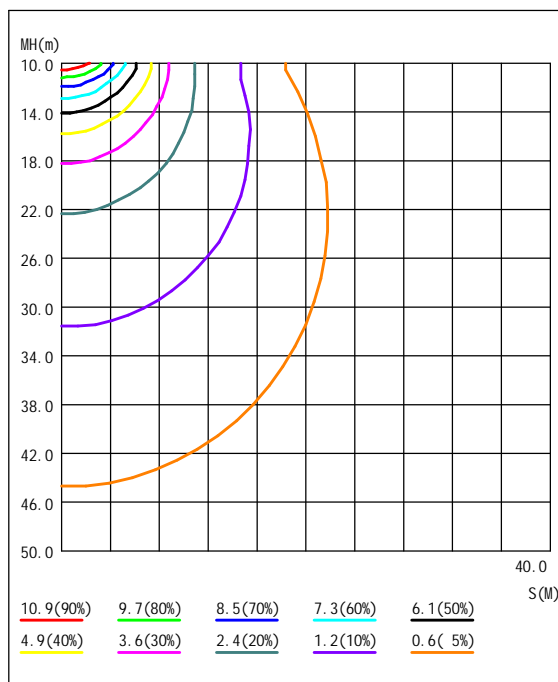
Humidity(%): 60

Date: 2020-05-11

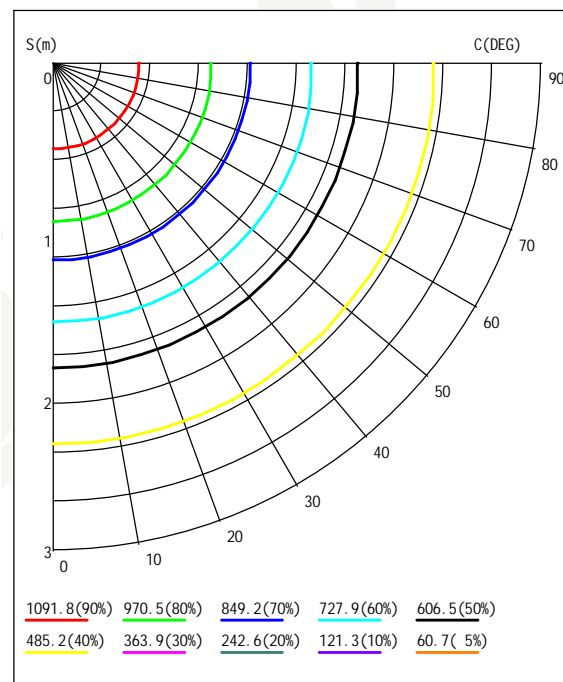
Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-05-11

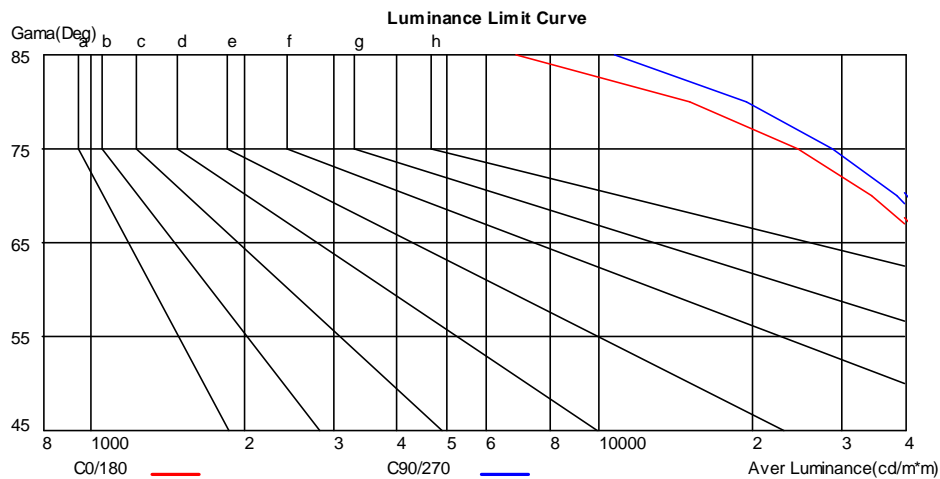
Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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	81487.0	72775.0	63758.0	54312.0	44487.0	34333.0	24583.0	15131.0	6854.0
C90	84274.0	75956.0	67113.0	57849.0	48410.0	38614.0	28877.0	19466.0	10704.0

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): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

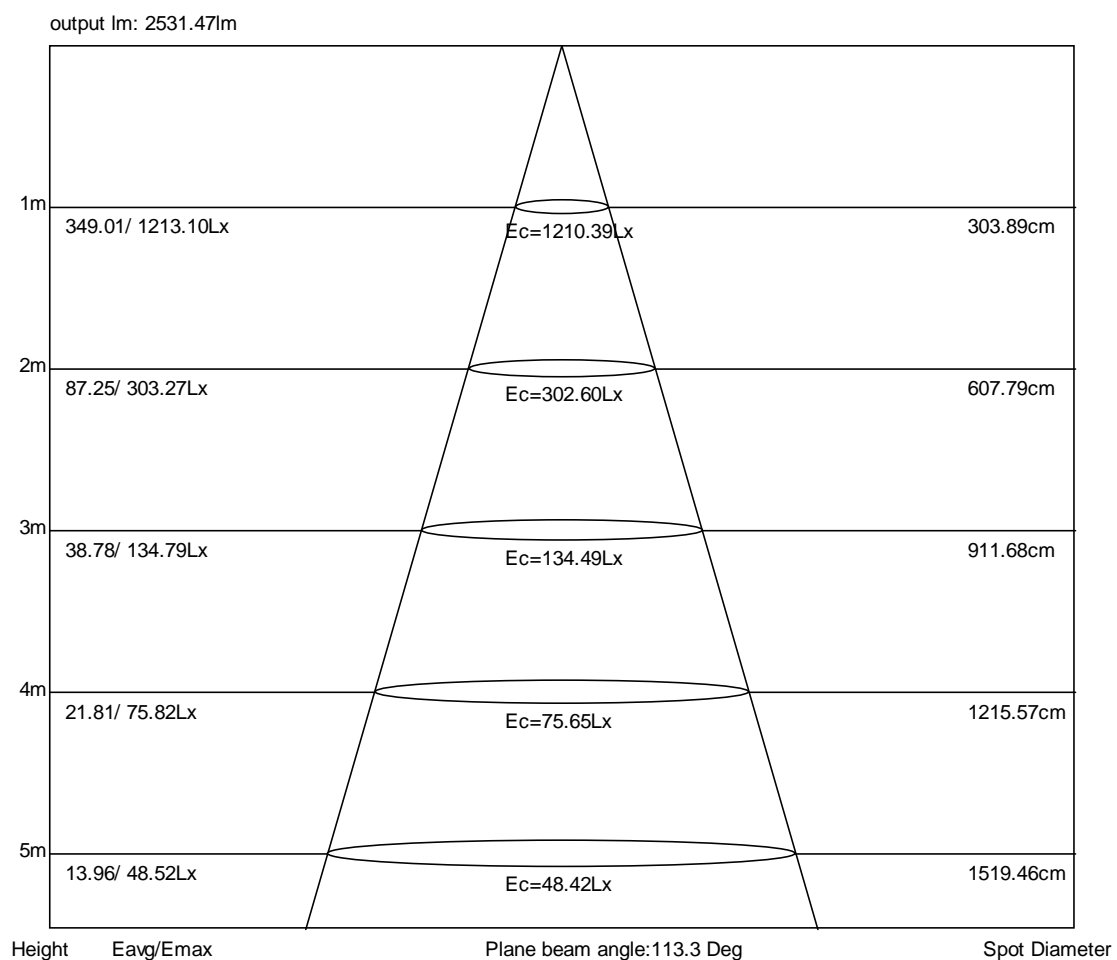
Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

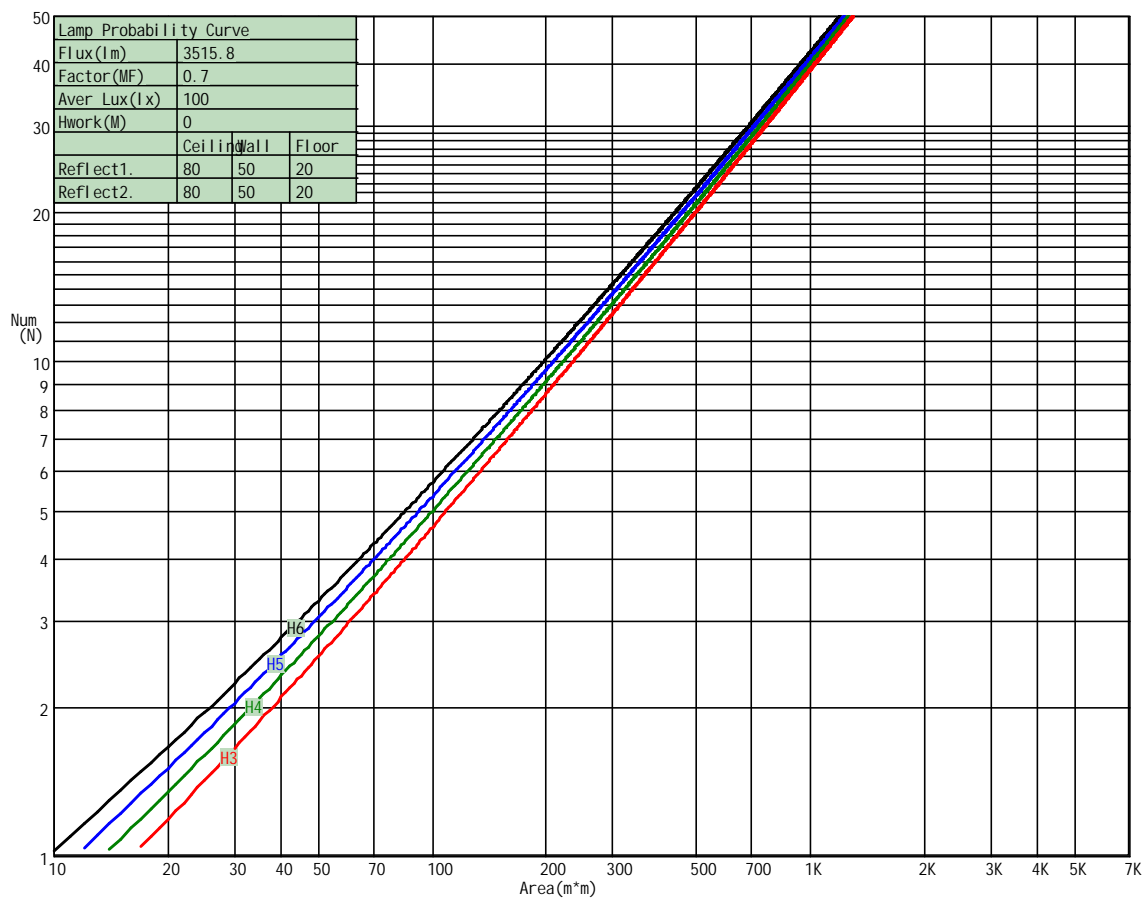
Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m ²): 0.306	Protect Angle(Deg):

Lamp Probability Curve



Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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	28	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	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	71	51	34	67	48	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	0.94	0.91	0.93	0.9	0.88	0.89	0.87	0.85
2	0.9	0.83	0.77	0.88	0.82	0.76	0.84	0.79	0.74	0.81	0.77	0.73	0.78	0.74	0.71
3	0.79	0.7	0.64	0.77	0.69	0.63	0.74	0.68	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	0.54	0.66	0.59	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	0.46	0.57	0.5	0.45	0.55	0.49	0.45
6	0.56	0.47	0.4	0.55	0.46	0.4	0.53	0.46	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	0.46	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	0.29	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	0.31	0.26	0.37	0.3	0.26	0.36	0.3	0.25

Gama Angle Range: -90 - 90(Deg)

Gama interval (Deg): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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	0.32	0.18	0.06	0.31	0.18	0.06	0.3	0.17	0.05	0.29	0.16	0.05	0.27	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	0.17	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	0.01
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): 2.5

Temperature(Deg): 26

Tester: 01

Distance(m): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size:
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	1209	1210	1207	1206	1209	1202	1201	1198	0-5	28.9	28.9
10	1194	1198	1197	1195	1191	1182	1181	1176	5-10	85.7	115
15	1166	1174	1175	1172	1165	1150	1151	1146	10-15	139	254
20	1129	1142	1141	1138	1127	1108	1110	1105	15-20	188	442
25	1084	1098	1099	1097	1079	1059	1061	1054	20-25	231	674
30	1028	1045	1048	1045	1025	1000	1003	995	25-30	266	940
35	965	985	987	985	961	932	936	927	30-35	292	1232
40	894	917	918	915	887	856	862	851	35-40	308	1540
45	815	839	843	838	808	774	780	767	40-45	314	1853
50	728	757	760	754	723	689	693	682	45-50	309	2163
55	638	669	671	669	632	597	602	590	50-55	295	2458
60	543	576	578	578	536	502	507	499	55-60	271	2729
65	445	484	484	483	437	407	410	403	60-65	239	2968
70	343	387	386	388	338	309	313	305	65-70	200	3168
75	246	290	289	292	240	215	217	210	70-75	156	3323
80	151	197	195	200	146	124	126	121	75-80	109	3432
85	68.5	109	107	112	62.5	40.1	42.6	39.1	80-85	62.2	3494
90	8.69	28.2	34.2	31.1	1.61	1.4	1.52	1.14	85-90	21.5	3516
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): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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	1209	1209	1210	1209	1208	1207	1206	1206	1207	1209	1206	1203	1202	1201	1200	1199	1199	1204
10.0	1194	1196	1198	1198	1197	1197	1196	1195	1193	1191	1187	1183	1182	1181	1180	1178	1178	1186
15.0	1166	1169	1173	1174	1174	1174	1173	1171	1168	1165	1158	1152	1151	1151	1150	1147	1148	1157
20.0	1129	1135	1141	1142	1141	1140	1139	1137	1132	1127	1119	1110	1109	1110	1109	1107	1108	1119
25.0	1084	1090	1097	1099	1099	1099	1098	1095	1087	1079	1071	1062	1060	1061	1060	1056	1057	1071
30.0	1028	1035	1043	1046	1047	1047	1046	1043	1034	1025	1014	1003	1001	1002	1001	997	998	1013
35.0	965	974	982	985	987	987	986	982	971	961	948	935	934	935	934	930	931	948
40.0	894	904	914	917	918	917	916	912	899	887	873	859	858	861	860	855	856	875
45.0	815	825	836	840	842	842	839	835	821	808	793	778	776	778	777	771	772	794
50.0	728	741	754	758	759	758	756	751	737	723	708	692	690	692	690	686	687	708
55.0	638	651	666	670	671	671	670	665	649	632	617	600	598	601	600	594	595	617
60.0	543	558	573	577	578	578	578	573	554	536	521	506	504	506	505	501	503	524
65.0	445	462	480	484	484	484	483	478	457	437	424	411	408	410	409	405	407	426
70.0	343	363	382	387	386	387	387	382	360	338	325	312	310	312	311	308	309	327
75.0	246	265	286	290	289	289	291	286	263	240	229	218	216	217	216	213	214	230
80.0	151	171	192	196	195	196	198	194	169	146	136	126	124	126	125	123	124	138
85.0	68.5	86.4	105	109	108	108	110	106	84.1	62.5	52.7	42.6	40.9	42.1	41.8	40.2	42.3	55.7
90.0	8.69	17.2	26	30.1	32.8	33.5	32.1	27.9	14.5	1.61	1.52	1.42	1.44	1.49	1.44	1.26	1.97	5.39
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): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-05-11

Remark:

Measured Para U: 230.9V I: 136.0mA P: 29.80W PF: 0.946 Test LM: 3515.79lm		
Lamp Name: 1203	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	17.3	18.7	17.6	18.9	19.1	17.5	18.9	17.7	19.1	19.3
3H	18.2	19.5	18.5	19.7	19.9	18.5	19.8	18.7	20.0	20.2
4H	18.6	19.8	18.9	20.1	20.3	19.0	20.2	19.2	20.4	20.6
6H	18.9	20.1	19.2	20.3	20.6	19.4	20.5	19.7	20.8	21.0
8H	19.0	20.1	19.3	20.4	20.7	19.6	20.7	19.9	20.9	21.2
12H	19.1	20.2	19.4	20.4	20.7	19.7	20.8	20.0	21.0	21.3
4H 2H	17.7	18.9	18.0	19.1	19.4	17.9	19.0	18.2	19.2	19.5
3H	18.8	19.8	19.2	20.1	20.4	19.0	20.0	19.4	20.3	20.6
4H	19.4	20.3	19.7	20.6	20.9	19.7	20.6	20.0	20.9	21.2
6H	19.8	20.7	20.2	21.0	21.3	20.3	21.1	20.6	21.4	21.8
8H	20.0	20.8	20.4	21.1	21.5	20.5	21.3	20.9	21.6	22.0
12H	20.1	20.8	20.5	21.2	21.6	20.7	21.5	21.1	21.8	22.2
8H 4H	20.7	21.4	21.1	21.8	22.2	21.0	21.7	21.4	22.1	22.5
6H	21.4	22.0	21.8	22.4	22.8	21.8	22.4	22.2	22.8	23.2
8H	21.7	22.2	22.1	22.6	23.1	22.2	22.7	22.6	23.1	23.6
12H	21.9	22.4	22.4	22.8	23.3	22.5	23.0	23.0	23.4	23.9
12H 4H	20.7	21.3	21.2	21.7	22.2	21.0	21.6	21.4	22.0	22.4
6H	21.5	22.0	21.9	22.4	22.9	21.9	22.4	22.3	22.8	23.3
8H	21.8	22.2	22.3	22.7	23.2	22.3	22.7	22.8	23.2	23.7
Variations with the observer position at spacings:										
S = 1.0H	0.3/-0.4					0.3/-0.4				
1.5H	0.5/-0.4					0.4/-0.4				
2.0H	0.1/-0.4					0.1/-0.3				

Gama Angle Range: -90 - 90(Deg)

C Angle Range: 0 - 360(Deg)

Gama interval (Deg): 2.5

C interval (Deg): 45

Temperature(Deg): 26

Humidity(%): 60

Tester: 01

Date: 2020-05-11

Distance(m): 8.97

Remark:

Test System: ZWL Goniophotometer System V3.0