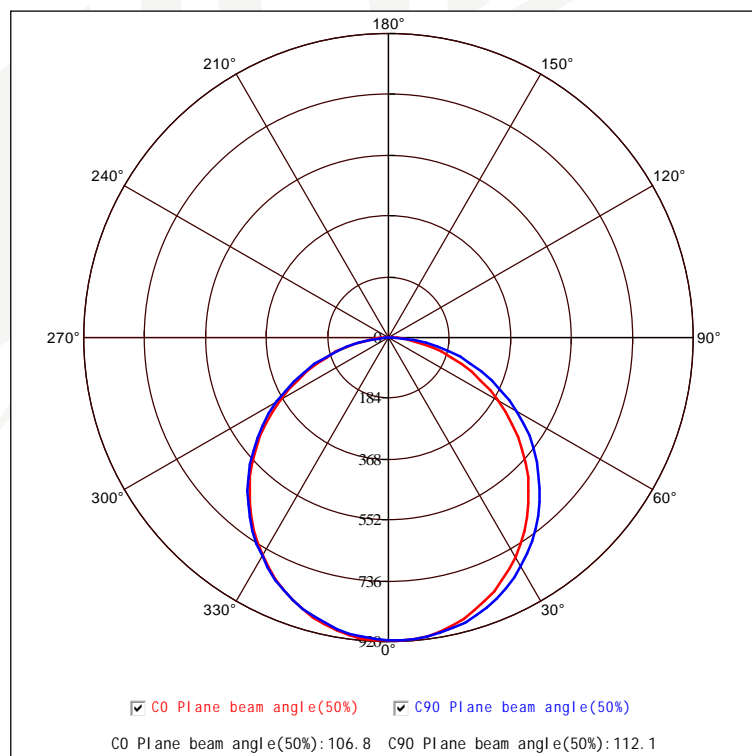


Goniophotometer Test Report

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm						
Lamp Name:		Lamp Type:		Weight(kg):		
Lamp ID:		Lamp Spec:		Shape Size:		
Manufactory:		Sur(m^2): 0.1		Protect Angle(Deg):		
Light Source Data			Photometric Data			
Model			Peak Value(cd)	918.4	Efficiency(lm/w)	89.9
Nominal P(w)	1.0	Position	0.0, 2.5	UP(C0-C180)	0.0	
Rated Volt(v)	230.0	Total Flux(lm)	2521.329	Down(C0-C180)	52.3	
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)	47.7	

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

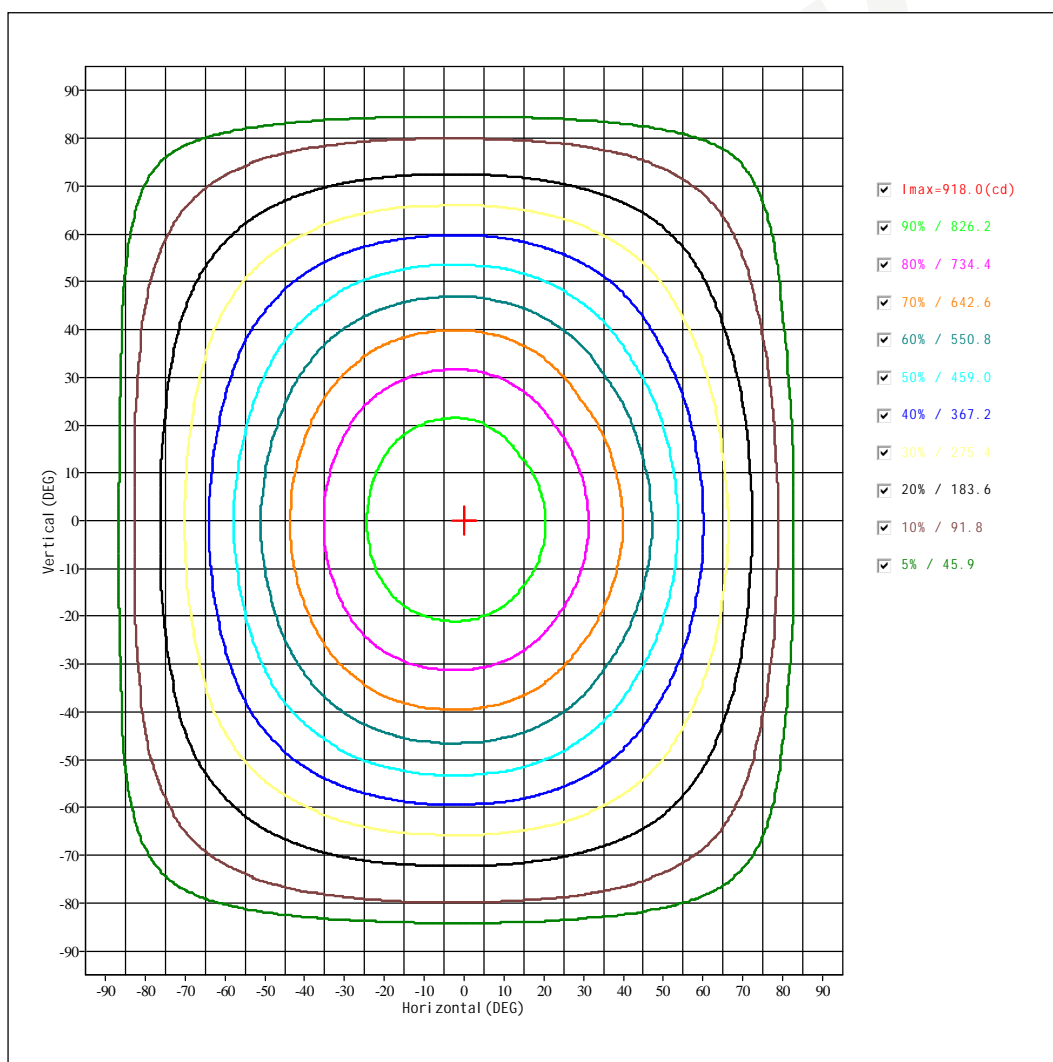
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.1	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

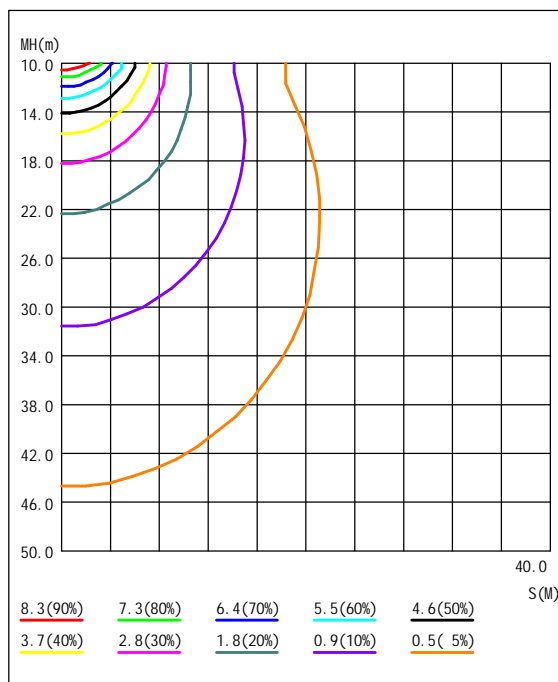
Humidity(%): 60

Date: 2020-04-15

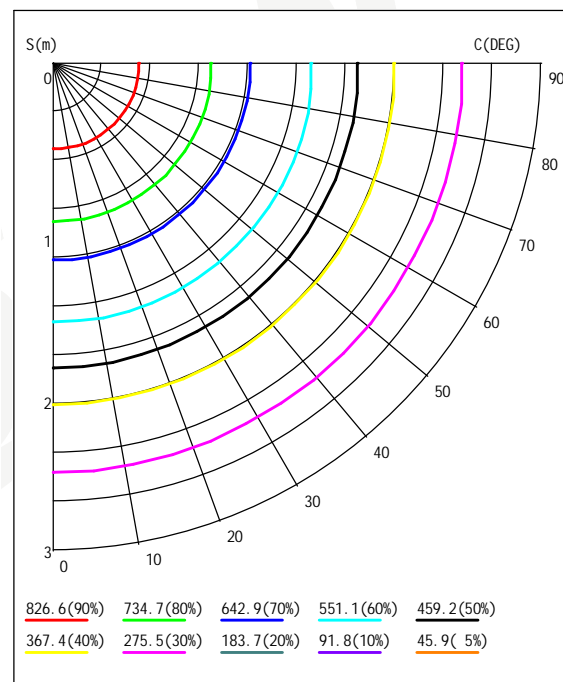
Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.1	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: 2020-04-15

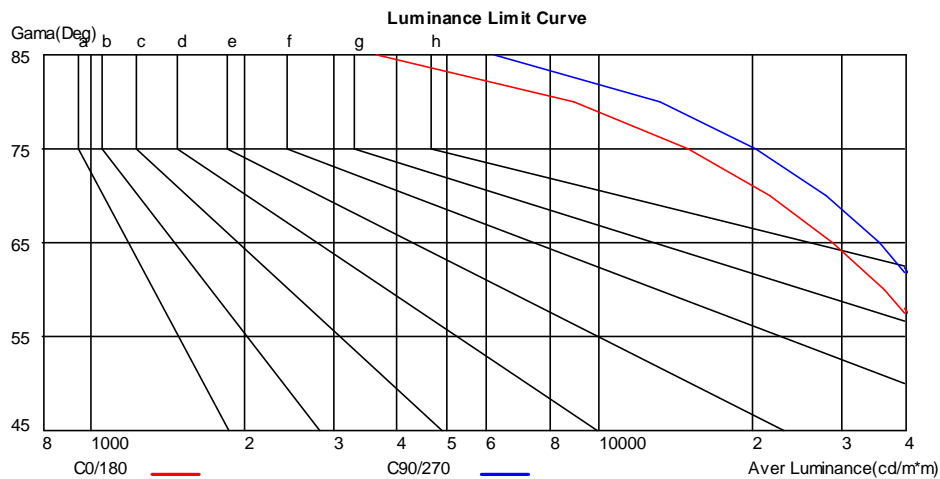
Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.1	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m²)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	57769.0	51037.0	43810.0	36467.0	28782.0	21738.0	15013.0	8915.0	3647.0
C90	63169.0	56808.0	50069.0	42959.0	35593.0	28004.0	20407.0	13171.0	6191.0

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

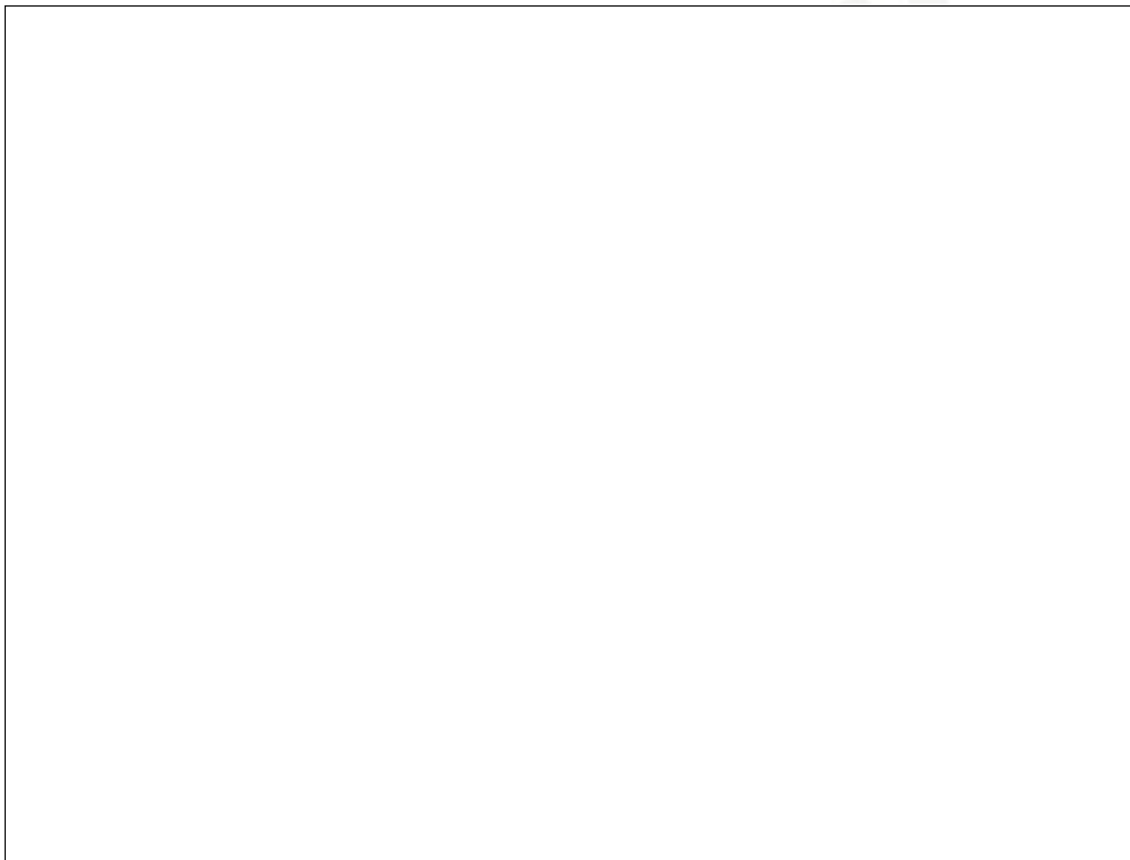
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m ²): 0.1	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

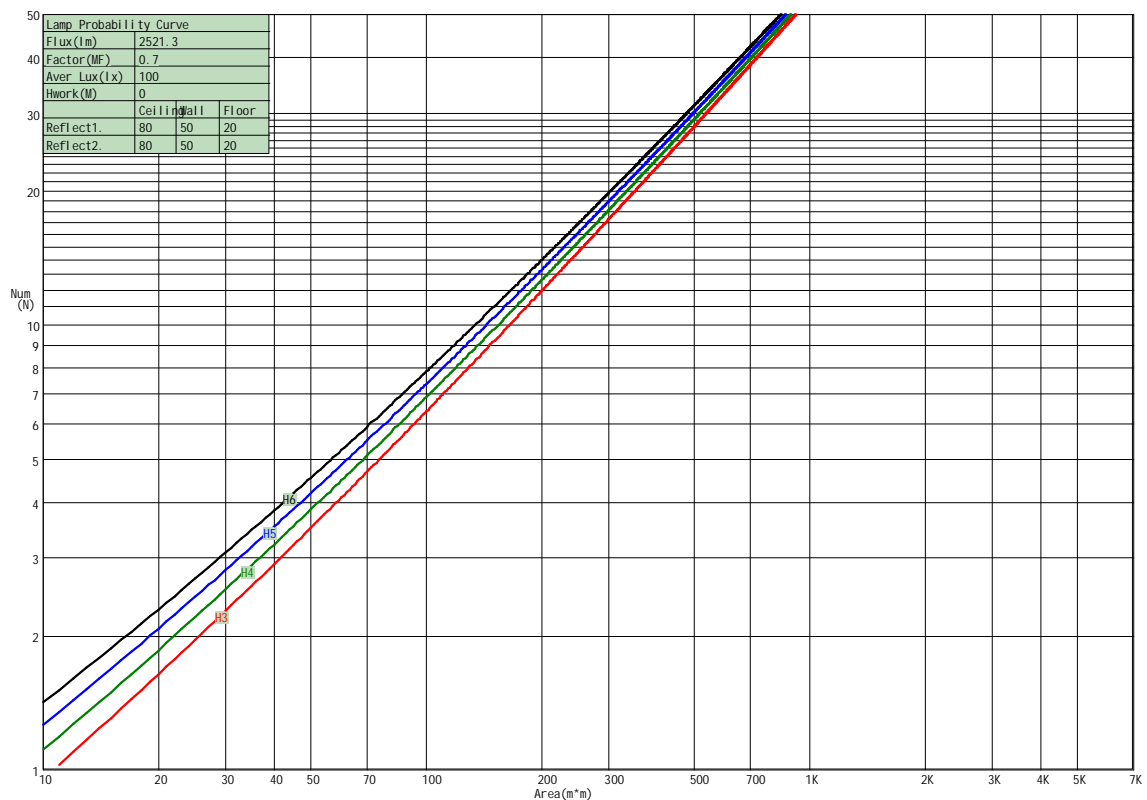
Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.3lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m ²): 0.1	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: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Si ze:
Manufactory:	Sur(m^2): 0.1	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	30	53	39	29
1.25	63	45	32	60	43	31	54	40	29
1.50	65	46	32	61	44	31	55	41	29
2.00	67	48	33	64	46	32	57	42	30
2.50	69	49	33	65	47	32	57	42	29
3.00	70	50	33	65	47	32	58	42	29
4.00	71	51	33	67	48	32	58	42	28
5.00	72	52	33	67	48	32	58	43	28

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	1	0.96	1.02	0.98	0.94	0.97	0.94	0.91	0.94	0.91	0.89	0.9	0.88	0.86
2	0.91	0.84	0.78	0.89	0.83	0.77	0.85	0.8	0.75	0.82	0.78	0.74	0.79	0.75	0.72
3	0.8	0.71	0.65	0.78	0.71	0.64	0.75	0.69	0.63	0.72	0.67	0.62	0.7	0.65	0.61
4	0.71	0.62	0.55	0.69	0.61	0.55	0.67	0.6	0.54	0.64	0.58	0.53	0.62	0.57	0.52
5	0.63	0.54	0.47	0.62	0.54	0.47	0.6	0.52	0.47	0.58	0.51	0.46	0.56	0.5	0.46
6	0.57	0.48	0.41	0.56	0.47	0.41	0.54	0.47	0.41	0.52	0.46	0.41	0.51	0.45	0.4
7	0.52	0.43	0.37	0.51	0.42	0.37	0.49	0.42	0.36	0.48	0.41	0.36	0.46	0.4	0.36
8	0.47	0.39	0.33	0.46	0.38	0.33	0.45	0.38	0.32	0.44	0.37	0.32	0.43	0.37	0.32
9	0.43	0.35	0.29	0.43	0.35	0.29	0.41	0.34	0.29	0.4	0.34	0.29	0.39	0.33	0.29
10	0.4	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.26	0.37	0.31	0.26

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: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm															
Lamp Name:								Lamp Type:				Weight(kg):			
Lamp ID:								Lamp Spec:				Shape Si ze:			
Manufactory:								Sur(m^2): 0.1				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	0.17	0.06	0.3	0.17	0.05	0.29	0.16	0.05	0.27	0.16	0.05	0.26	0.15	0.05
2	0.29	0.16	0.05	0.28	0.16	0.05	0.27	0.15	0.05	0.26	0.15	0.05	0.25	0.14	0.04
3	0.27	0.14	0.04	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04	0.23	0.13	0.04
4	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04
5	0.23	0.12	0.03	0.22	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	0.19	0.1	0.03	0.19	0.1	0.03
7	0.2	0.1	0.03	0.19	0.1	0.03	0.19	0.1	0.03	0.18	0.09	0.03	0.18	0.09	0.03
8	0.18	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.02	0.17	0.08	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): 8.97

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 360(Deg)

C interval (Deg): 45

Humidity(%): 60

Date: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m ²): 0.1	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	916	916	914	913	913	908	907	905	0-5	21.8	21.8
10	898	905	903	902	896	891	892	886	5-10	64.7	86.5
15	873	885	887	883	871	864	868	858	10-15	105	191
20	842	854	862	855	837	829	835	824	15-20	141	333
25	802	820	829	819	796	788	798	782	20-25	173	505
30	754	777	788	776	750	739	753	732	25-30	198	703
35	701	726	742	727	696	683	701	678	30-35	216	919
40	642	670	689	672	636	622	644	616	35-40	226	1145
45	578	609	632	611	573	558	583	551	40-45	229	1374
50	510	542	568	544	505	488	516	482	45-50	223	1597
55	438	472	501	476	434	418	445	412	50-55	210	1808
60	365	406	430	407	359	351	372	344	55-60	191	1999
65	288	336	356	337	284	278	294	273	60-65	166	2165
70	217	267	280	265	213	207	219	201	65-70	136	2302
75	150	196	204	194	148	137	144	132	70-75	103	2405
80	89.2	128	132	126	88.4	71.7	74.6	66.9	75-80	69.4	2475
85	36.5	65.5	61.9	62.7	33.5	16.5	16.4	14	80-85	36.3	2511
90	3.93	11.2	11.2	11.4	1.05	1.6	1.5	1.4	85-90	10.5	2521
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: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight (kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m ²): 0.1	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	916	916	916	915	914	914	913	913	913	913	911	908	907	907	906	906	906	911
10.0	898	901	905	905	904	903	903	902	899	896	894	891	891	892	891	888	887	893
15.0	873	878	883	885	886	886	884	882	876	871	868	864	865	867	866	862	860	867
20.0	842	847	853	857	860	860	857	853	845	837	833	830	831	834	833	828	826	834
25.0	802	810	818	823	827	826	822	817	806	796	792	789	791	796	795	787	784	793
30.0	754	764	774	780	786	786	780	773	761	750	745	740	743	750	748	739	735	744
35.0	701	712	723	731	739	739	732	723	709	696	691	685	689	697	696	686	681	691
40.0	642	655	667	676	685	685	677	668	652	636	630	624	630	640	638	625	619	631
45.0	578	592	606	617	627	627	618	607	590	573	567	560	566	578	576	562	554	566
50.0	510	524	538	551	562	563	552	540	522	505	497	490	497	510	509	493	485	498
55.0	438	453	469	482	494	495	484	471	452	434	427	420	427	439	438	423	415	427
60.0	365	383	401	414	424	425	415	402	380	359	355	352	358	367	366	353	346	355
65.0	288	309	331	343	352	352	343	332	308	284	281	278	283	291	290	280	275	281
70.0	217	239	262	271	277	277	270	259	236	213	210	207	211	217	215	207	203	210
75.0	150	170	191	199	202	202	197	189	168	148	143	138	139	143	142	136	134	142
80.0	89.2	106	124	129	131	130	128	122	105	88.4	81.1	73.5	72.6	74	72.9	69.4	69.3	79.4
85.0	36.5	49.2	62.3	64.3	62.7	62.1	62.5	59.5	46.3	33.5	26.1	18.4	16.5	16.4	15.9	14.8	16.5	26.6
90.0	3.93	7.1	10.4	11.2	11.2	11.3	11.3	10.2	5.56	1.05	1.29	1.54	1.57	1.52	1.48	1.43	1.68	2.82
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: 2020-04-15

Remark:

Measured Para U: 230.8V I: 125.0mA P: 28.05W PF: 0.970 Test LM: 2521.33lm		
Lamp Name:	Lamp Type:	Weight(kg):
Lamp ID:	Lamp Spec:	Shape Size:
Manufactory:	Sur(m^2): 0.1	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	19.7	21.1	19.9	21.2	21.4	20.1	21.5	20.3	21.6	21.8
3H	20.4	21.7	20.7	21.9	22.1	21.0	22.3	21.3	22.5	22.7
4H	20.8	22.0	21.0	22.2	22.4	21.5	22.7	21.8	22.9	23.1
6H	21.0	22.1	21.3	22.4	22.6	21.9	23.0	22.2	23.2	23.5
8H	21.1	22.1	21.4	22.4	22.7	22.0	23.1	22.3	23.3	23.6
12H	21.1	22.1	21.4	22.4	22.7	22.1	23.1	22.4	23.4	23.7
4H 2H	20.1	21.2	20.4	21.4	21.7	20.4	21.5	20.7	21.7	22.0
3H	21.1	22.0	21.4	22.3	22.6	21.5	22.5	21.9	22.8	23.1
4H	21.5	22.4	21.9	22.7	23.0	22.1	23.0	22.5	23.3	23.7
6H	21.9	22.7	22.3	23.0	23.4	22.7	23.5	23.0	23.8	24.1
8H	22.0	22.8	22.4	23.1	23.5	22.9	23.6	23.3	24.0	24.3
12H	22.1	22.8	22.5	23.1	23.5	23.0	23.7	23.4	24.1	24.5
8H 4H	23.0	23.6	23.4	24.0	24.4	23.5	24.2	24.0	24.6	25.0
6H	23.5	24.1	24.0	24.5	24.9	24.3	24.8	24.7	25.3	25.7
8H	23.7	24.3	24.2	24.7	25.1	24.6	25.1	25.0	25.5	26.0
12H	23.9	24.4	24.4	24.8	25.3	24.8	25.3	25.3	25.7	26.2
12H 4H	23.0	23.6	23.4	24.0	24.4	23.5	24.1	24.0	24.5	25.0
6H	23.6	24.1	24.1	24.5	25.0	24.3	24.8	24.8	25.2	25.7
8H	23.9	24.3	24.3	24.7	25.2	24.7	25.1	25.2	25.6	26.0
Variations with the observer position at spacings:										
S = 1.0H	0.4/-0.5					0.3/-0.4				
1.5H	0.6/-0.5					0.4/-0.4				
2.0H	0.2/-0.4					0.1/-0.2				

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: 2020-04-15

Remark: