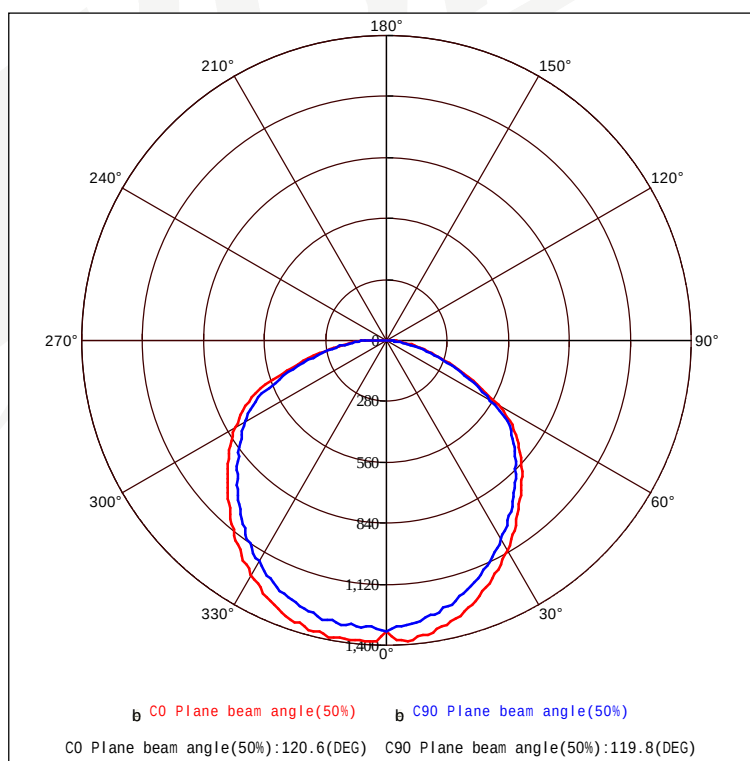


Goniophotometer Test Report

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm						
Lamp Name: WATER PROOF FIXTURE			Lamp Type:		Weight(kg):	
Lamp ID:SY6160-H			Lamp Spec:		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	SY6160-H		Peak Value(cd)	1396.8	Efficiency(lm/w)	90.6
Nominal P(w)		1.0	Position	180.0,7.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	5372.58	Down(C0-C180)	48.0
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)	52.0

Planar Intensity Distribution Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

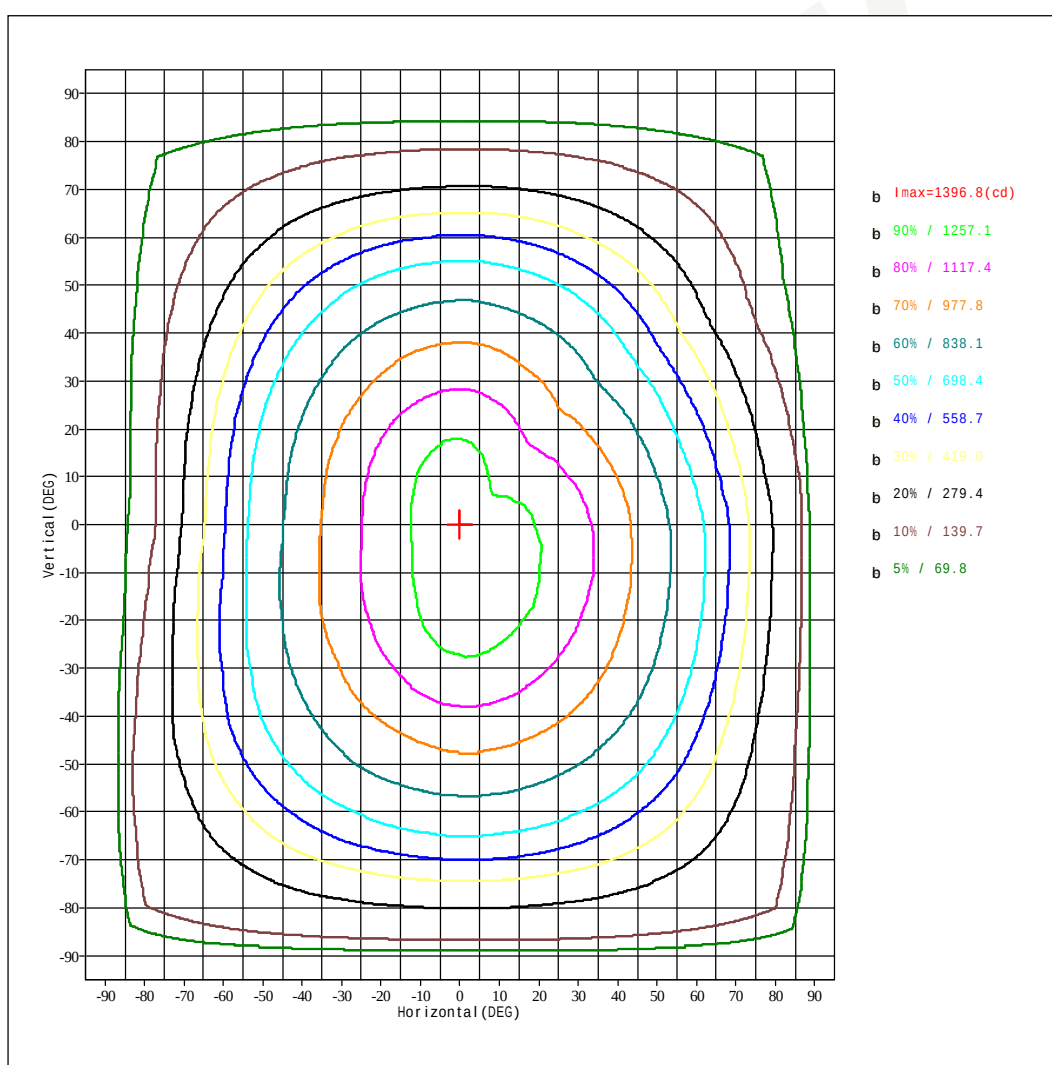
Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Planar IsoCandela Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

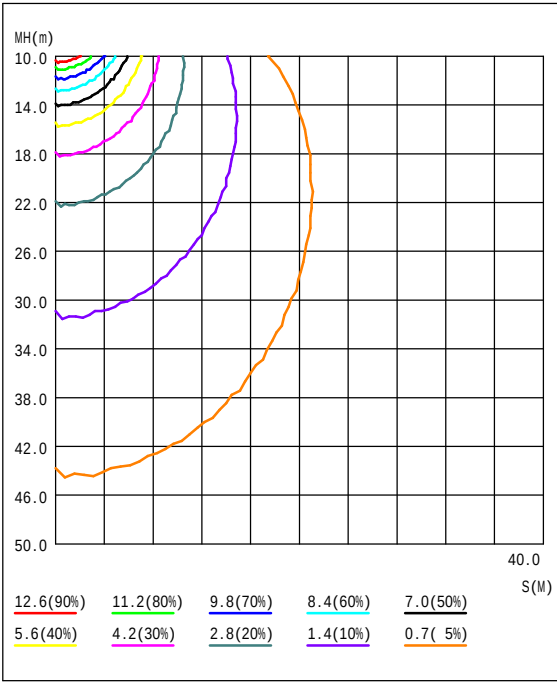
Humidity(%): 60

Date: 2023-10-30

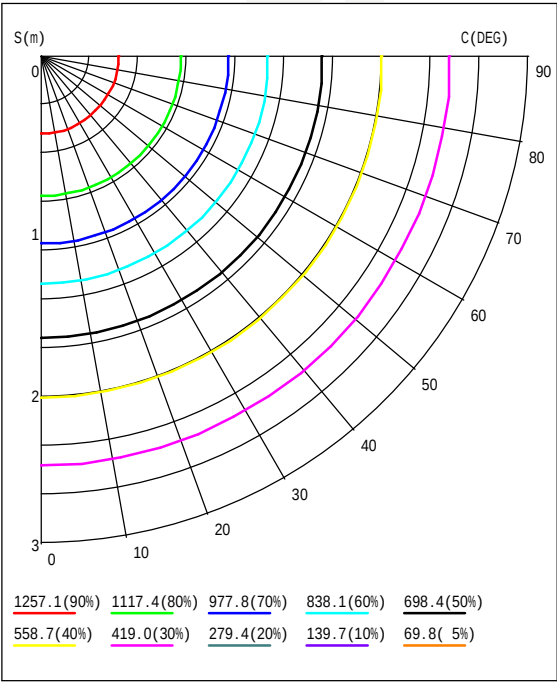
Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Spacial ISOLUX Curve



Planar ISOLUX Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-10-30

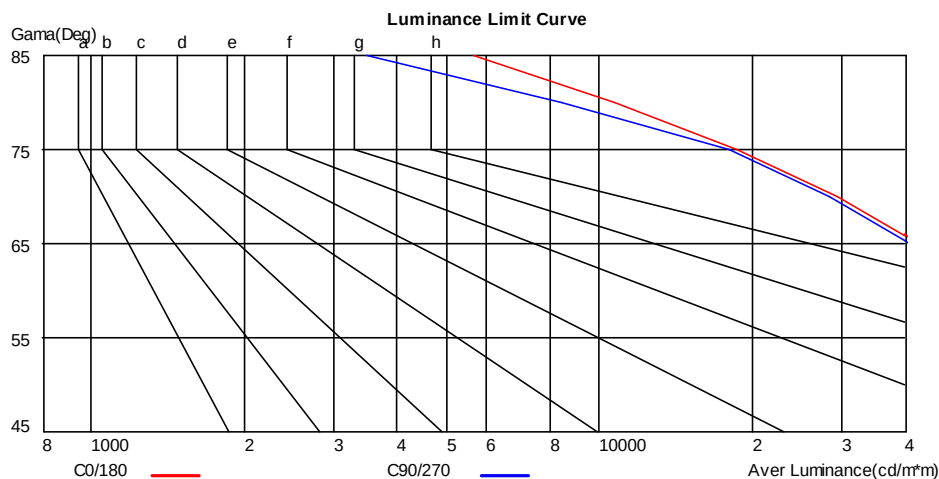
Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m²m)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	87905.3	78957.3	70535.8	56415.3	42226.8	29519.5	18739.3	10754.3	5661.3
C90	82617.8	76397.3	67664.8	53977.8	40881.8	28331.8	18081.0	8398.0	3487.7

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): 30

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

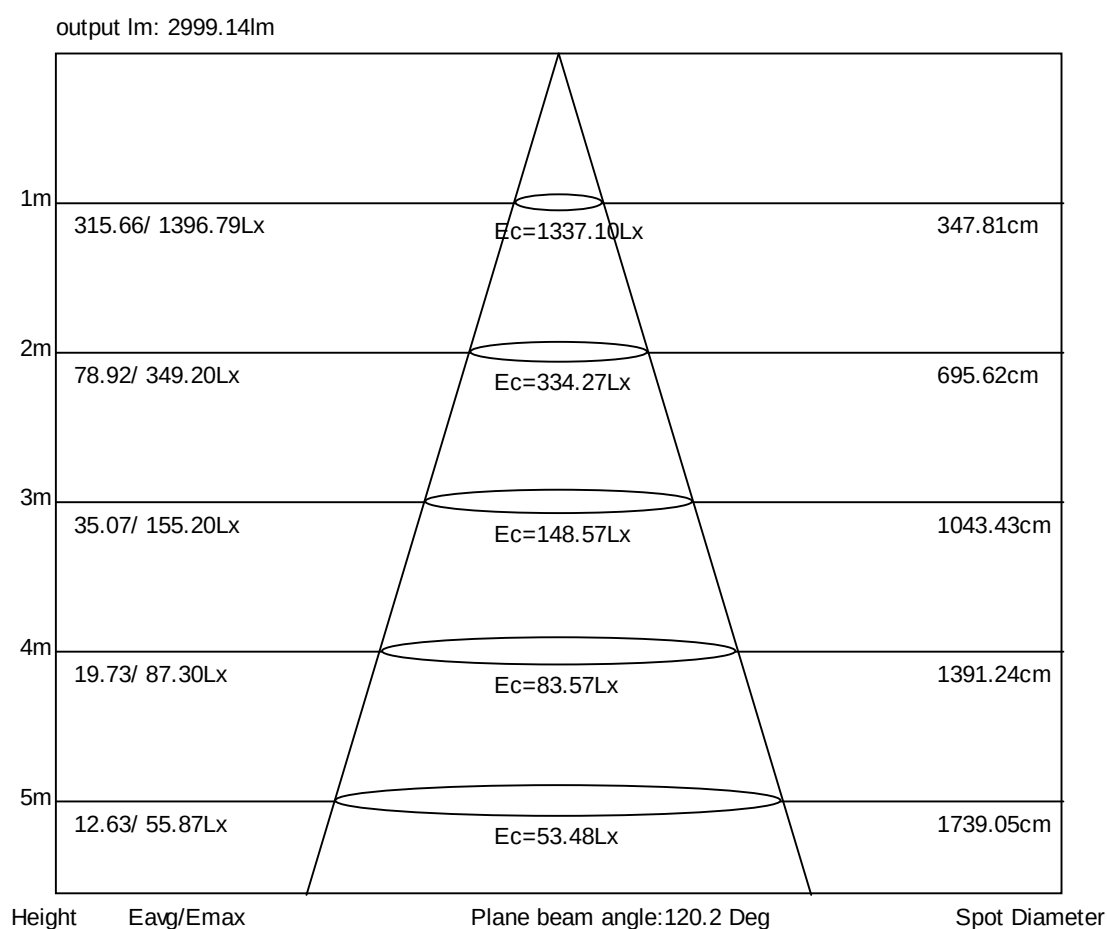
Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Average Illumination



Gama Angle Range: -90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range: 0 - 180(Deg)

C interval(Deg): 45

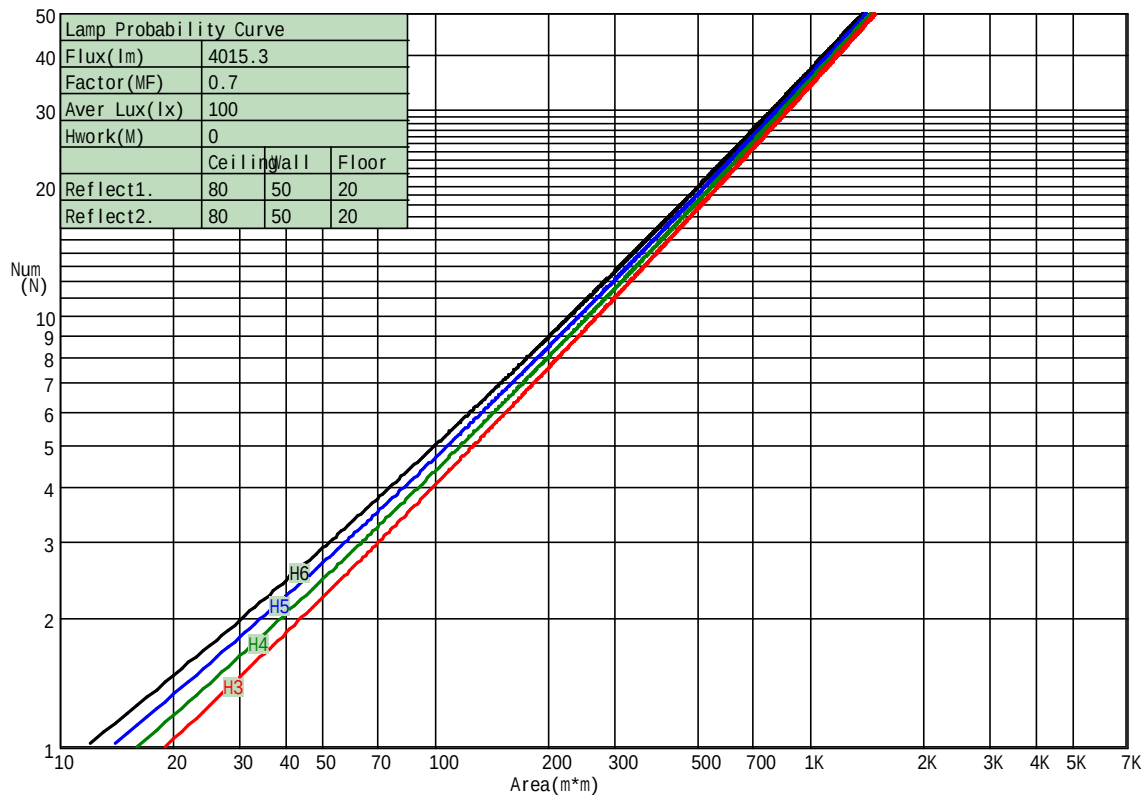
Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Lamp Probability Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m ²):	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	36	27	50	36	27	47	34	26
0.80	56	40	29	54	39	28	50	37	27
1.00	59	42	30	57	41	29	52	38	28
1.25	62	44	31	59	42	30	54	39	28
1.50	64	45	31	61	44	30	55	40	29
2.00	67	47	32	63	45	31	56	41	29
2.50	68	48	32	64	46	31	57	41	28
3.00	69	49	32	65	47	31	57	41	28
4.00	71	50	32	66	47	31	57	42	28
5.00	71	51	33	67	48	31	58	42	27

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	0.98	0.94	1.01	0.97	0.93	0.96	0.93	0.9	0.92	0.9	0.87	0.89	0.87	0.85
2	0.89	0.82	0.76	0.87	0.81	0.75	0.84	0.78	0.73	0.8	0.76	0.72	0.77	0.74	0.7
3	0.78	0.7	0.63	0.77	0.69	0.62	0.73	0.67	0.61	0.71	0.65	0.6	0.68	0.63	0.59
4	0.69	0.6	0.53	0.68	0.59	0.53	0.65	0.58	0.52	0.63	0.56	0.51	0.61	0.55	0.5
5	0.61	0.52	0.45	0.6	0.52	0.45	0.58	0.51	0.45	0.56	0.49	0.44	0.54	0.48	0.44
6	0.55	0.46	0.39	0.54	0.46	0.39	0.52	0.45	0.39	0.51	0.44	0.39	0.49	0.43	0.38
7	0.5	0.41	0.35	0.49	0.41	0.35	0.48	0.4	0.34	0.46	0.39	0.34	0.45	0.39	0.34
8	0.46	0.37	0.31	0.45	0.37	0.31	0.44	0.36	0.31	0.42	0.35	0.3	0.41	0.35	0.3
9	0.42	0.33	0.28	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.27	0.38	0.32	0.27
10	0.39	0.3	0.25	0.38	0.3	0.25	0.37	0.3	0.25	0.36	0.29	0.25	0.35	0.29	0.25

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 1

Temperature(Deg): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m ²):	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	0.33	0.19	0.06	0.32	0.18	0.06	0.31	0.18	0.06	0.29	0.17	0.05	0.28	0.16	0.05
2	0.3	0.17	0.05	0.3	0.16	0.05	0.28	0.16	0.05	0.27	0.15	0.05	0.26	0.15	0.05
3	0.28	0.15	0.04	0.27	0.15	0.04	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04
4	0.26	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	0.24	0.12	0.03	0.23	0.12	0.03	0.22	0.12	0.03	0.22	0.11	0.03	0.21	0.11	0.03
6	0.22	0.11	0.03	0.21	0.11	0.03	0.21	0.11	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	0.19	0.1	0.03	0.18	0.09	0.03
8	0.19	0.09	0.03	0.19	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	0.09	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	0.17	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.08	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	0.16	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	0.09	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	0.05	0.03	0.01	0.01	0.01	0
9	0.12	0.06	0.02	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): 30

Tester: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	Protect Angle(Deg):

Ring-shaped Flux Data Table

Gm\C(Deg)	0	45	90	135	180	225	270	315	Range	Ring	T(lm)
5	1375	1333	1304	1300	1386	1353	1325	1274	0-5	31.9	31.9
10	1335	1316	1280	1278	1392	1362	1314	1255	5-10	94.7	127
15	1304	1264	1230	1269	1376	1339	1292	1222	10-15	154	281
20	1241	1203	1172	1231	1340	1298	1269	1167	15-20	208	489
25	1171	1142	1120	1172	1297	1259	1220	1102	20-25	255	744
30	1111	1069	1038	1126	1237	1210	1167	1037	25-30	292	1036
35	1022	989	977	1067	1159	1137	1112	971	30-35	321	1357
40	948	914	905	993	1104	1059	1030	900	35-40	340	1696
45	879	845	826	925	1017	990	961	829	40-45	350	2046
50	790	766	764	855	941	922	891	755	45-50	352	2398
55	705	676	677	781	878	848	808	672	50-55	346	2745
60	564	537	540	709	790	765	740	535	55-60	327	3071
65	422	412	409	618	703	671	655	409	60-65	289	3360
70	295	283	283	464	581	517	511	288	65-70	238	3597
75	187	179	181	332	405	373	383	184	70-75	177	3774
80	108	104	84	221	277	251	263	108	75-80	121	3895
85	56.6	59.2	34.9	134	174	154	166	59.8	80-85	75.3	3970
90	34.8	27.4	23.9	73.2	96.8	122	96.7	45.1	85-90	44.8	4015
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): 30

Tester: zyg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-10-30

Remark:

Measured Para U: 215.3V I: 467.6mA P: 59.30W PF: 0.589 Test LM: 5372.58lm		
Lamp Name: WATER PROOF FIXTURE	Lamp Type:	Weight(kg):
Lamp ID: SY6160-H	Lamp Spec:	Shape Size:
Manufactory: LIPER	Sur(m^2):	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	1375	1356	1337	1323	1310	1303	1301	1309	1348	1386	1371	1356	1344	1331	1314	1291	1285	1331
10.0	1335	1327	1318	1304	1288	1279	1279	1290	1342	1392	1379	1365	1346	1324	1301	1274	1264	1300
15.0	1304	1287	1268	1253	1237	1239	1256	1281	1329	1376	1360	1343	1323	1302	1277	1245	1231	1268
20.0	1241	1224	1207	1193	1179	1185	1212	1243	1292	1340	1322	1302	1288	1275	1247	1200	1175	1208
25.0	1171	1158	1145	1135	1125	1132	1155	1186	1242	1297	1281	1264	1246	1228	1194	1141	1110	1141
30.0	1111	1093	1073	1058	1045	1057	1097	1138	1188	1237	1225	1213	1196	1177	1139	1080	1045	1079
35.0	1022	1007	992	985	980	997	1038	1077	1119	1159	1149	1140	1129	1118	1081	1017	977	1000
40.0	948	933	918	911	907	924	964	1005	1055	1104	1084	1064	1050	1037	1002	943	905	927
45.0	879	864	849	839	830	848	892	935	977	1017	1006	993	981	968	932	872	835	857
50.0	790	779	768	765	764	784	825	865	904	941	933	924	912	898	861	800	759	774
55.0	705	693	680	676	677	699	747	792	835	878	865	851	835	816	778	717	676	691
60.0	564	552	540	538	539	577	654	718	755	790	779	768	757	745	695	602	538	551
65.0	422	418	413	411	409	454	549	627	666	703	689	674	666	659	602	490	411	417
70.0	295	290	285	283	283	323	405	477	530	581	553	524	515	512	462	361	289	292
75.0	187	184	180	179	180	214	282	340	373	405	391	376	376	380	339	249	184	186
80.0	108	106	104	97.3	88.3	114	176	227	252	277	266	254	255	261	229	159	108	108
85.0	56.6	57.7	58.9	51.2	40.2	56.5	101	138	156	174	165	157	158	164	143	94.7	59.4	58
90.0	34.8	31.6	28.2	26.3	24.7	34.7	57	75.8	86.5	96.8	108	119	114	102	85.4	62.1	44	39.3
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): 30

Tester: zyg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2023-10-30

Remark: