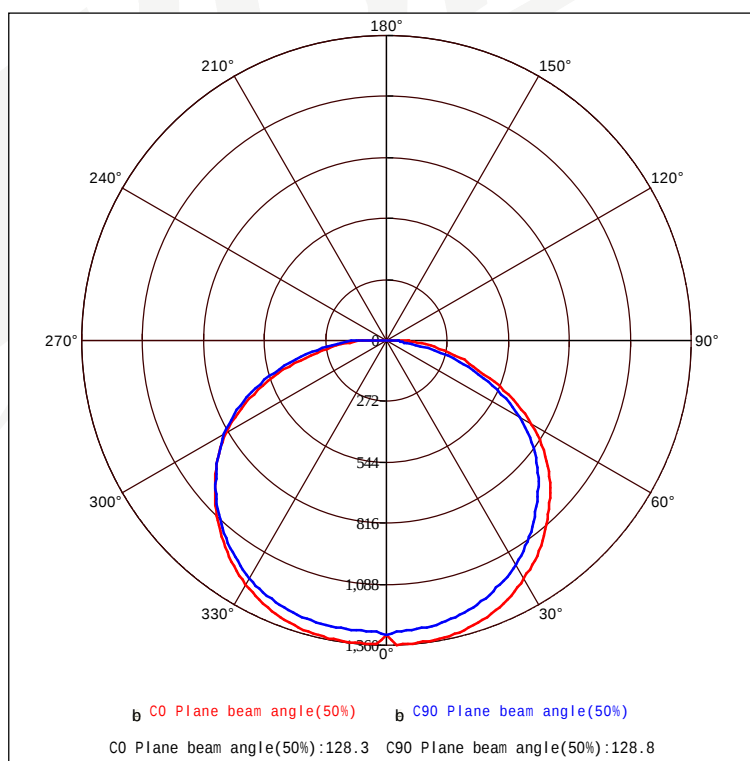


LED LAMP

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm						
Lamp Name: LPQP60W			Lamp Type:		Weight(kg):	
Lamp ID: LPUF-60AS-02			Lamp Spec: LPQP60W		Shape Size:	
Manufactory: LIPER			Sur(m^2):		Protect Angle(Deg):	
Light Source Data			Photometric Data			
Model	LPQP60W		Peak Value(cd)	1358.3	Efficiency(lm/w)	84.6
Nominal P(w)		1.0	Position	0.0,2.0	UP(C0-C180)	0.0
Rated Volt(v)		1.0	Total Flux(lm)	4518.152	Down(C0-C180)	49.8
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)	50.2

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

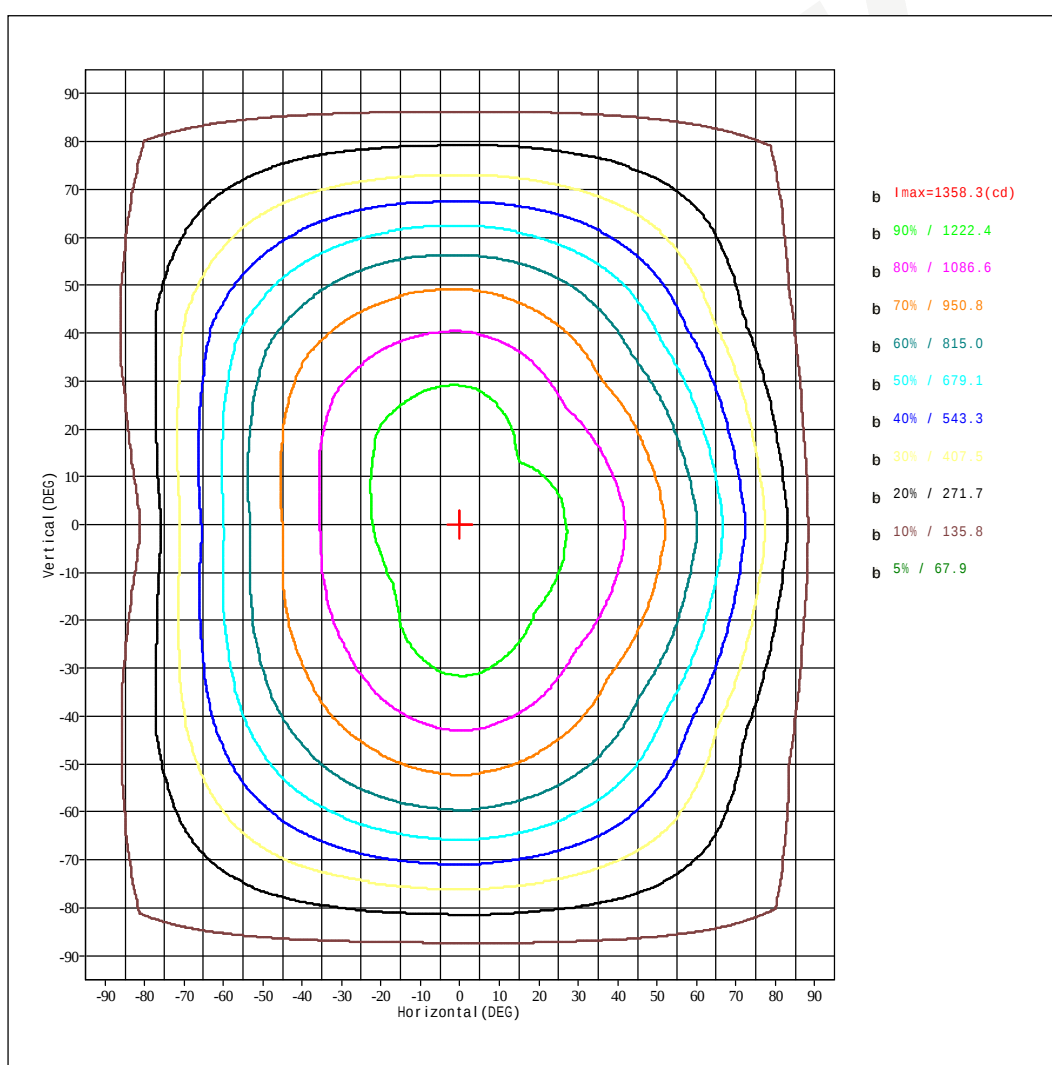
Humidity(%): 60

Date: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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: zxcg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

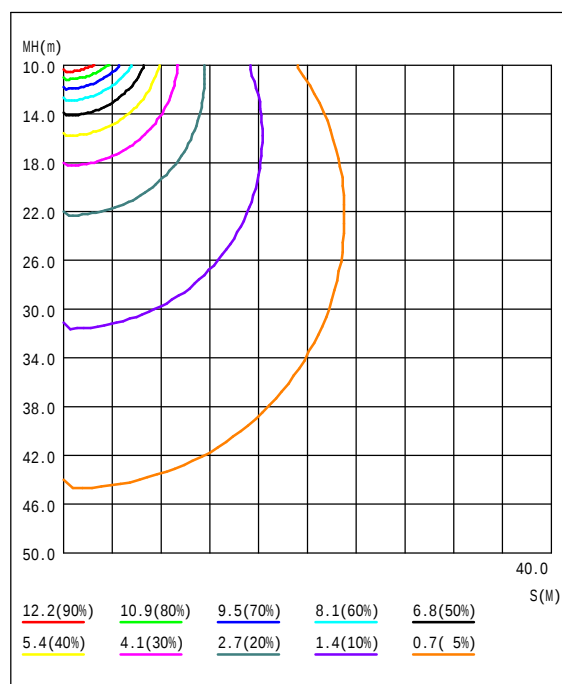
Humidity(%): 60

Date: 2021-5-5

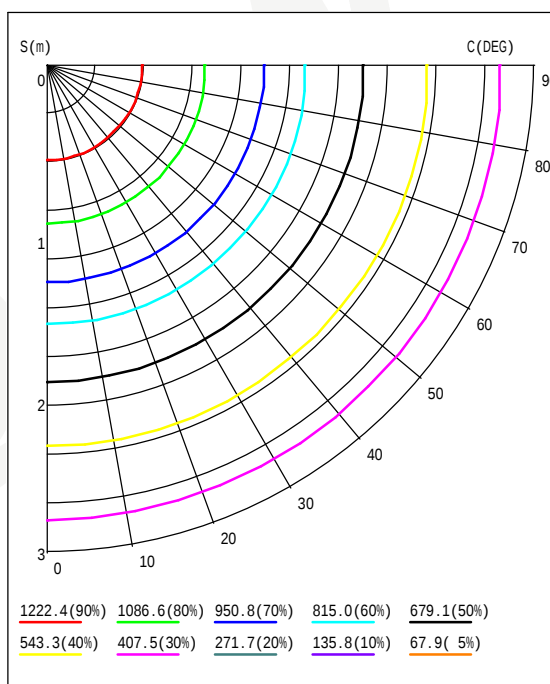
Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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: 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: 2021-5-5

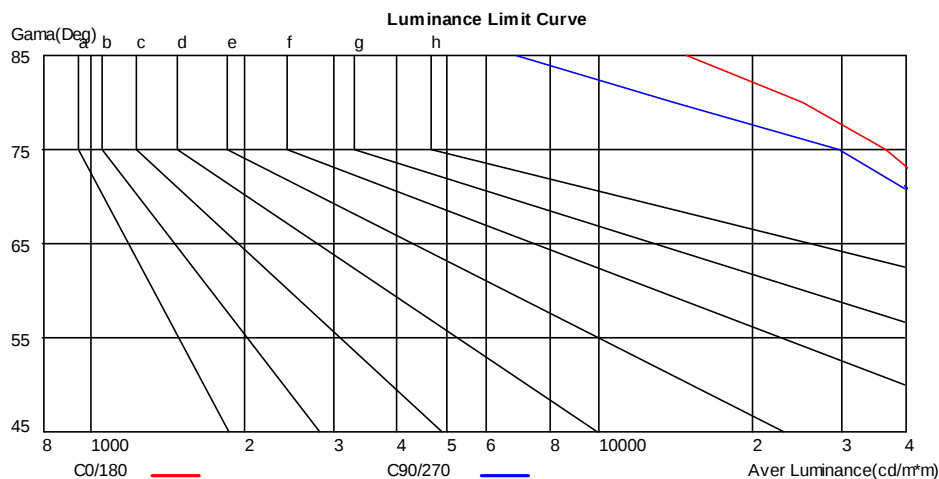
Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	Shape Size:
Manufactory: LIPER	Sur(m ²):	Protect Angle(Deg):

Luminance Limit Curve

Aver Luminance(cd/m ² m)									
Gm(Deg)	45	50	55	60	65	70	75	80	85
C0	102049.7	93964.5	84720.3	73761.3	61142.3	47478.5	36843.8	25236.0	14837.5
C90	94906.8	87052.8	78013.8	67307.5	55332.3	42389.0	29648.3	14033.8	6867.0

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): 30

Tester: zxg

Distance(m): 5.000

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

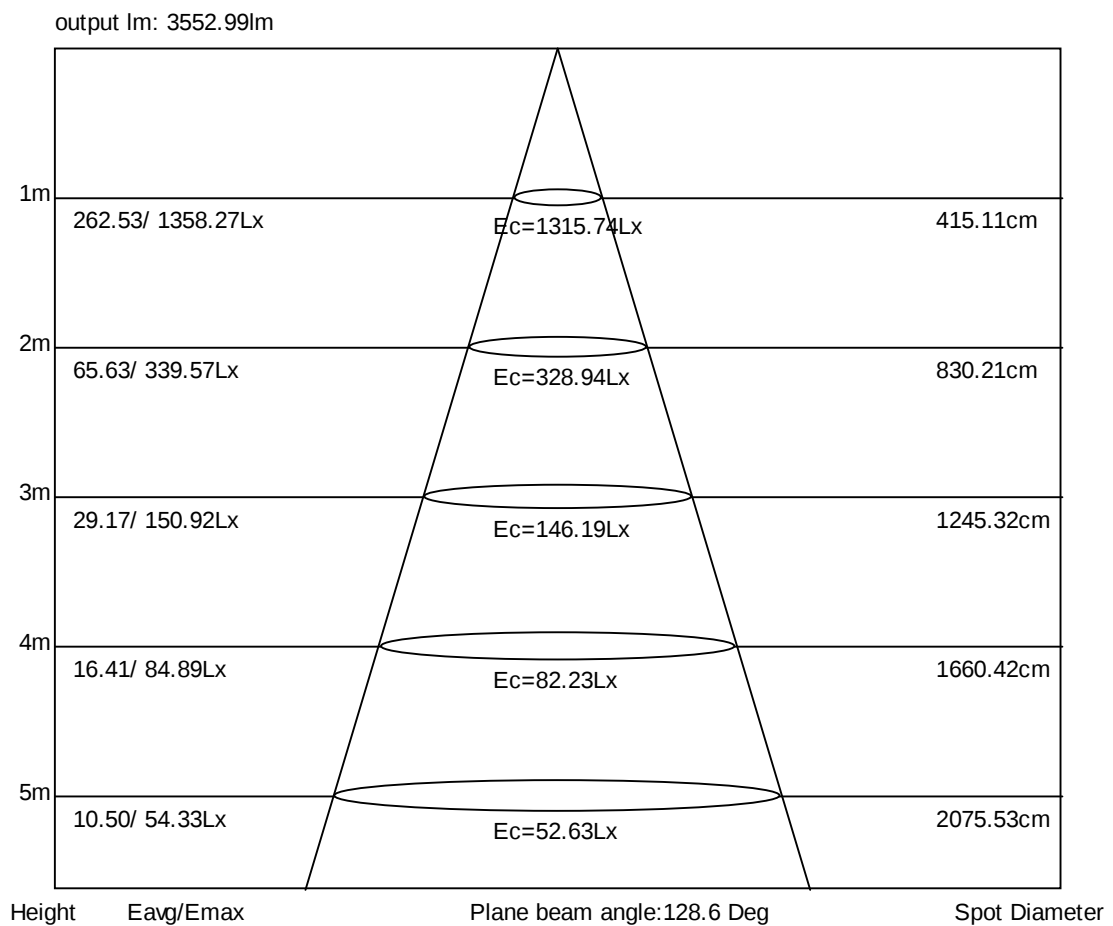
Humidity(%): 60

Date: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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

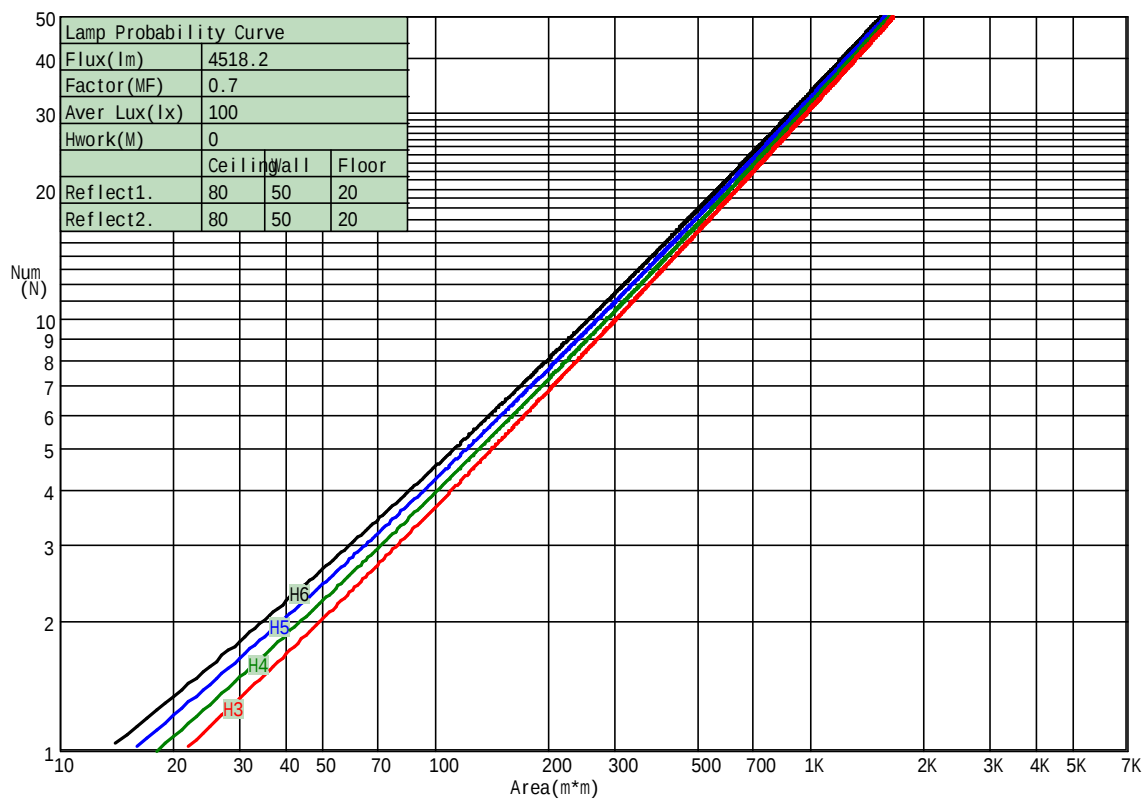
Humidity(%): 60

Date: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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	37	27	50	36	27	47	35	27
0.80	57	40	29	54	39	29	50	37	28
1.00	60	43	31	57	41	30	53	39	29
1.25	63	45	32	60	43	31	54	40	30
1.50	65	47	33	62	45	32	56	41	30
2.00	68	49	34	64	47	33	57	43	31
2.50	69	50	34	65	48	33	58	43	30
3.00	71	51	34	66	48	33	58	43	30
4.00	72	52	35	67	49	33	59	44	30
5.00	73	53	35	68	50	33	59	44	30

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	1.02	0.97	0.93	1	0.95	0.91	0.95	0.92	0.88	0.91	0.88	0.86	0.88	0.85	0.83
2	0.88	0.8	0.74	0.86	0.79	0.73	0.82	0.77	0.71	0.79	0.74	0.7	0.76	0.72	0.68
3	0.76	0.68	0.61	0.75	0.67	0.6	0.72	0.65	0.59	0.69	0.63	0.58	0.66	0.61	0.57
4	0.67	0.58	0.51	0.66	0.57	0.5	0.63	0.56	0.5	0.61	0.54	0.49	0.59	0.53	0.48
5	0.6	0.5	0.43	0.59	0.5	0.43	0.56	0.49	0.43	0.54	0.47	0.42	0.53	0.46	0.42
6	0.54	0.44	0.37	0.53	0.44	0.37	0.51	0.43	0.37	0.49	0.42	0.37	0.47	0.41	0.36
7	0.48	0.39	0.33	0.48	0.39	0.33	0.46	0.38	0.32	0.45	0.37	0.32	0.43	0.37	0.32
8	0.44	0.35	0.29	0.43	0.35	0.29	0.42	0.34	0.29	0.41	0.34	0.29	0.4	0.33	0.28
9	0.4	0.32	0.26	0.4	0.32	0.26	0.39	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.26
10	0.37	0.29	0.24	0.37	0.29	0.23	0.36	0.28	0.23	0.35	0.28	0.23	0.34	0.28	0.23

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: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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	0.35	0.2	0.06	0.34	0.19	0.06	0.33	0.19	0.06	0.31	0.18	0.06	0.3	0.17	0.06
2	0.32	0.17	0.05	0.31	0.17	0.05	0.3	0.17	0.05	0.29	0.16	0.05	0.28	0.16	0.05
3	0.29	0.15	0.05	0.28	0.15	0.05	0.27	0.15	0.04	0.26	0.14	0.04	0.25	0.14	0.04
4	0.26	0.14	0.04	0.26	0.14	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.13	0.04
5	0.24	0.12	0.04	0.24	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.03	0.21	0.11	0.03
6	0.22	0.11	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.2	0.11	0.03	0.2	0.1	0.03
7	0.21	0.1	0.03	0.2	0.1	0.03	0.2	0.1	0.03	0.19	0.1	0.03	0.18	0.1	0.03
8	0.19	0.09	0.03	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03
9	0.18	0.09	0.02	0.18	0.09	0.02	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02
10	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.16	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	0.18	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	0.03	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	0.06	0.03	0.05	0.03	0.02	0.02	0.01	0.01
6	0.15	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	0.13	0.07	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: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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	1358	1322	1296	1283	1356	1324	1300	1282	0-5	31.5	31.5
10	1352	1318	1286	1277	1355	1316	1299	1275	5-10	93.9	125
15	1337	1308	1266	1266	1345	1301	1293	1260	10-15	155	280
20	1310	1289	1236	1246	1325	1276	1280	1232	15-20	212	492
25	1271	1257	1198	1214	1295	1236	1255	1197	20-25	264	756
30	1221	1215	1149	1173	1251	1192	1221	1152	25-30	309	1064
35	1166	1161	1089	1121	1198	1134	1174	1096	30-35	345	1409
40	1096	1099	1021	1066	1134	1066	1118	1030	35-40	371	1780
45	1020	1033	949	999	1068	993	1058	959	40-45	387	2166
50	940	958	871	927	991	913	987	882	45-50	393	2559
55	847	877	780	849	908	821	912	794	50-55	388	2947
60	738	783	673	760	813	713	826	690	55-60	370	3317
65	611	674	553	653	700	589	726	571	60-65	337	3654
70	475	550	424	534	572	455	609	442	65-70	289	3943
75	368	418	296	406	436	321	481	313	70-75	231	4174
80	252	290	140	282	303	204	350	201	75-80	169	4343
85	148	180	68.7	177	191	121	231	115	80-85	109	4452
90	96.2	98	49.5	100	107	96.2	132	85.4	85-90	65.8	4518
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: 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: 2021-5-5

Remark:

Measured Para U: 218.8V I: 405.0mA P: 53.40W PF: 0.601 Test LM: 4518.15lm		
Lamp Name: LPQP60W	Lamp Type:	Weight(kg):
Lamp ID: LPUF-60AS-02	Lamp Spec: LPQP60W	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	1358	1342	1326	1313	1301	1293	1287	1291	1324	1356	1342	1327	1316	1305	1296	1288	1290	1325
10.0	1352	1337	1322	1307	1293	1284	1280	1285	1321	1355	1338	1321	1311	1303	1293	1282	1283	1318
15.0	1337	1324	1311	1294	1275	1266	1266	1275	1310	1345	1326	1306	1299	1295	1286	1271	1268	1303
20.0	1310	1301	1291	1272	1248	1238	1243	1255	1291	1325	1304	1281	1277	1279	1270	1248	1241	1276
25.0	1271	1265	1259	1238	1211	1201	1209	1223	1259	1295	1269	1243	1243	1251	1242	1216	1205	1239
30.0	1221	1219	1216	1193	1163	1154	1165	1182	1217	1251	1225	1199	1202	1215	1206	1175	1160	1191
35.0	1166	1164	1162	1138	1105	1096	1110	1130	1165	1198	1170	1141	1147	1165	1157	1122	1103	1135
40.0	1096	1097	1098	1073	1038	1031	1052	1074	1105	1134	1104	1073	1083	1107	1099	1059	1038	1068
45.0	1020	1026	1032	1006	967	960	983	1006	1038	1068	1035	1001	1014	1044	1036	991	966	994
50.0	940	948	956	929	890	883	909	934	963	991	957	922	937	971	964	917	889	915
55.0	847	860	874	845	801	795	827	856	883	908	870	831	851	892	886	833	800	824
60.0	738	758	778	747	697	692	731	766	790	813	769	724	750	801	796	735	695	717
65.0	611	639	667	634	580	575	621	659	680	700	652	601	634	696	692	622	575	594
70.0	475	508	542	509	451	448	498	538	555	572	521	468	505	575	572	497	445	460
75.0	368	390	413	378	323	320	370	409	422	436	385	333	373	446	444	368	319	344
80.0	252	269	286	241	173	171	236	285	294	303	260	215	252	318	317	250	206	230
85.0	148	162	177	144	93.1	92.4	141	179	185	191	160	128	157	207	206	153	119	134
90.0	96.2	97	97.8	82.1	60.1	60.6	83.5	101	104	107	102	97.4	108	124	122	101	86.6	91.5
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: 2021-5-5

Remark: