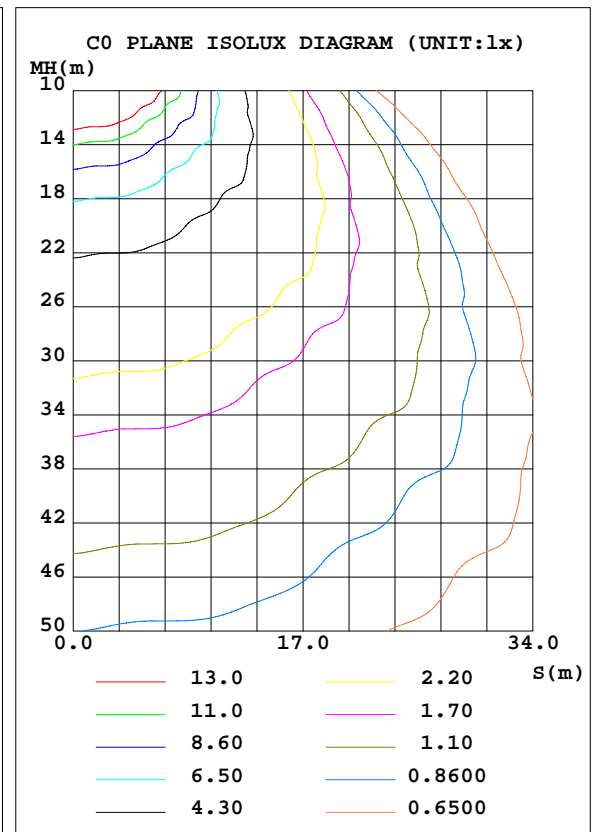
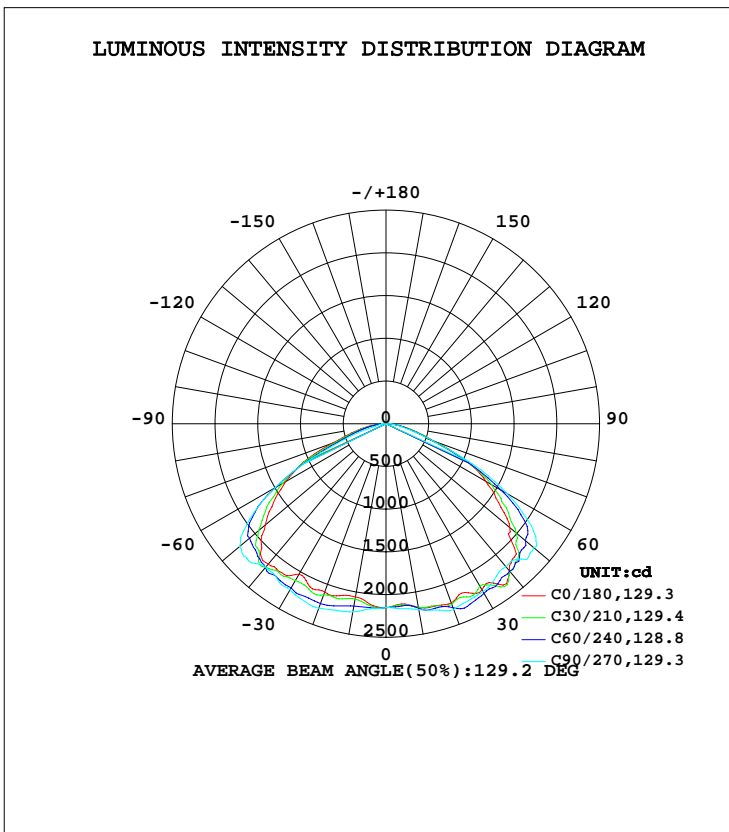


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.62 lm/W			
MODEL X-DD(35/50/65)W-(30/40/50)MSV		LMW(cd)	2358	S/MH(C0/180)	1.52
NOMINAL POWER(W)	65	LOR(%)	100.0	S/MH(C90/270)	1.56
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	8074.6	η UP, DN(C0-180)	0.2,50.3
NOMINAL FLUX(lm)	8074.6	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2,49.3
LAMPS INSIDE	1	η up(%)	0.4	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	120	η down(%)	99.6	CIBSE SHR MAX	1.75



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	2181	2180	2210	2128	2058	2119	2235	2200	0- 10	205.2	205.2	2.54,2.54
20	2232	2292	2313	2194	2095	2162	2296	2316	10- 20	625.7	830.9	10.3,10.3
30	2246	2327	2268	2228	2034	2168	2246	2293	20- 30	1033	1864	23.1,23.1
40	2248	2318	2186	2189	2144	2169	2190	2262	30- 40	1398	3263	40.4,40.4
50	1891	2068	2259	2057	1843	2007	2234	2121	40- 50	1672	4935	61.1,61.1
60	1350	1497	1635	1557	1358	1472	1500	1477	50- 60	1617	6552	81.1,81.1
70	597.1	586.7	570.9	594.7	662.3	582.0	487.7	519.6	60- 70	1012	7564	93.7,93.7
80	206.9	200.7	169.6	200.6	244.2	211.3	90.75	173.7	70- 80	370.7	7935	98.3,98.3
90	34.76	38.02	36.68	39.00	44.46	41.90	24.22	33.85	80- 90	106.7	8041	99.6,99.6
100	15.02	9.532	2.907	8.963	18.57	12.19	5.171	9.082	90-100	13.83	8055	99.8,99.8
110	3.970	2.147	9.619	1.918	6.124	2.784	9.272	2.919	100-110	7.696	8063	99.9,99.9
120	1.227	3.198	5.640	3.191	1.454	3.893	4.820	3.911	110-120	3.932	8067	99.9,99.9
130	1.464	2.929	3.202	2.883	1.863	3.684	2.785	3.271	120-130	2.788	8070	99.9,99.9
140	1.600	1.748	1.656	1.880	2.190	2.451	2.280	2.320	130-140	1.769	8071	100,100
150	1.818	1.888	1.670	1.694	2.545	2.642	2.680	2.563	140-150	1.306	8073	100,100
160	2.040	1.674	1.794	1.866	2.746	2.871	2.797	2.726	150-160	1.050	8074	100,100
170	2.257	2.216	1.840	1.954	2.581	2.779	2.601	2.597	160-170	0.6670	8074	100,100
180	2.223	2.464	2.407	2.483	2.302	2.450	2.394	2.567	170-180	0.2258	8075	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 6.7 %									UNIT:lm		

Conical surface Flux(90deg): 4076 lm

%lum = 50.5%
 %lamp = 50.5%

Conical surface Flux(120deg): 6552.2 lm

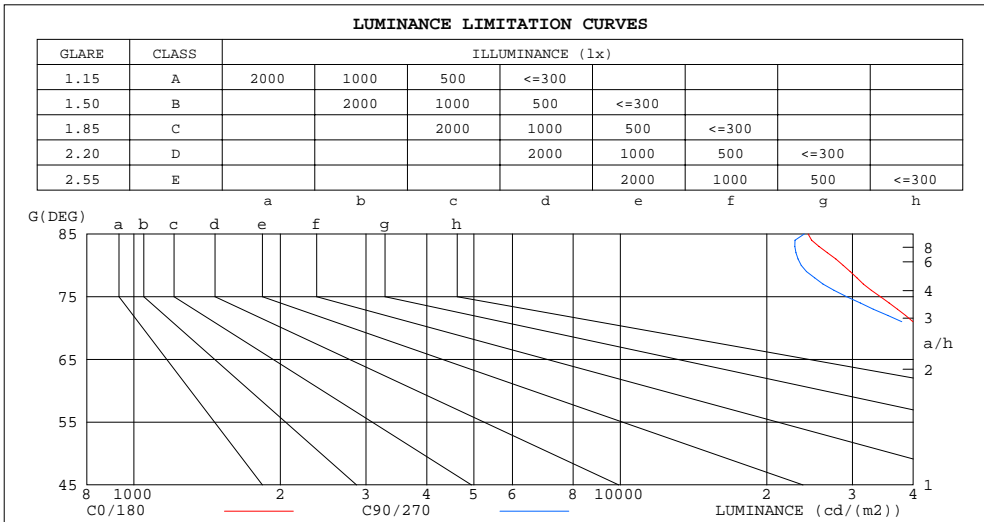
%lum = 81.1%
 %lamp = 81.1%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Peter li
 Test Date:13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance:2.500m [K=1.0117]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	24329	23882
80	28713	23538
75	34247	29205
70	42066	40222
65	59645	63801
60	65057	78799
55	67675	87239
50	70892	84694
45	73525	76331

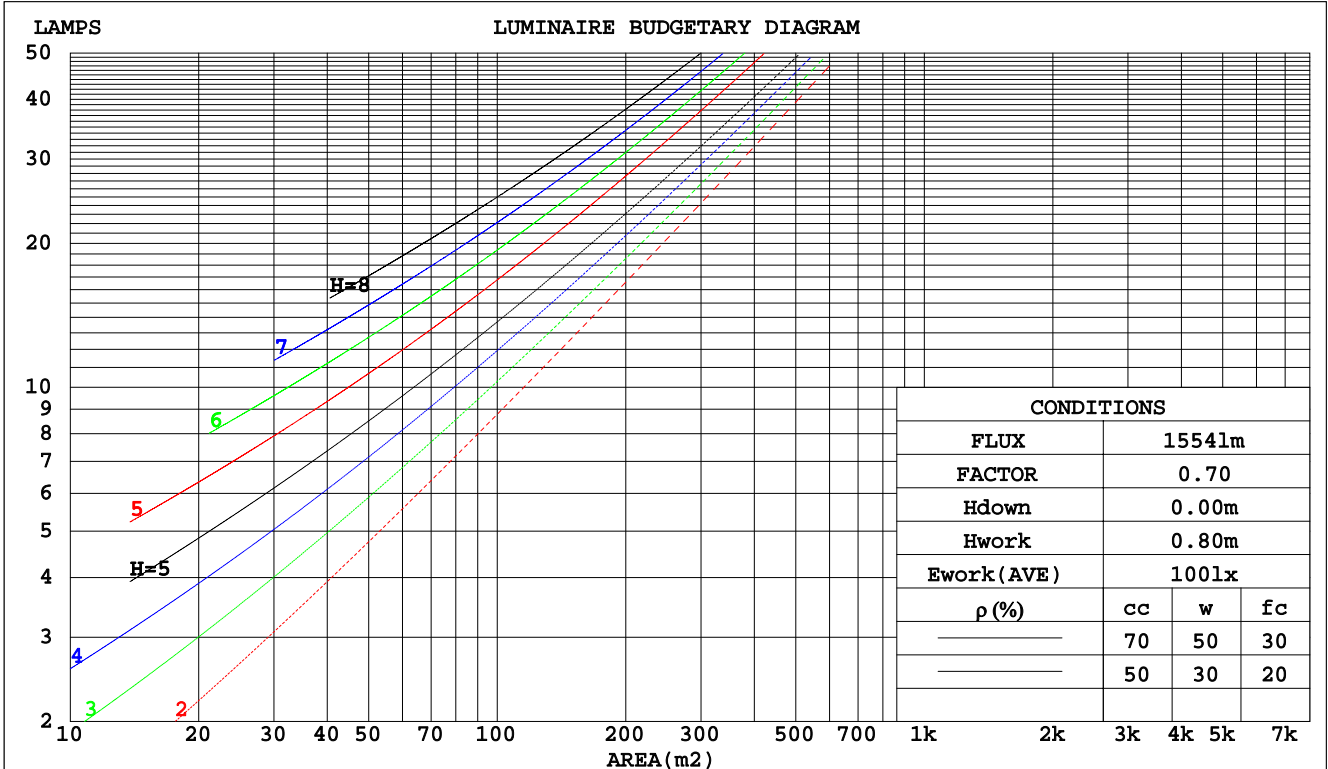
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
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	.00
1.0	1.04	1.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.75	.82	.77	.74	.79	.75	.72	.70
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.58	.51	.45	.56	.50	.44	.54	.49	.44	.42
6.0	.55	.46	.39	.54	.46	.39	.52	.45	.39	.51	.44	.38	.49	.43	.38	.36
7.0	.50	.41	.34	.49	.40	.34	.47	.40	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.42	.35	.30	.40	.34	.30	.28
9.0	.41	.33	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.24
10.0	.38	.30	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.300	.171	.054	.293	.167	.053	.280	.161	.051	.267	.154	.050	.256	.148	.048	
2.0	.288	.158	.048	.282	.155	.048	.270	.150	.047	.259	.145	.046	.249	.141	.044	
3.0	.270	.144	.043	.265	.142	.043	.254	.138	.042	.244	.134	.041	.235	.130	.040	
4.0	.251	.131	.038	.246	.129	.038	.237	.126	.038	.228	.123	.037	.220	.120	.036	
5.0	.234	.119	.034	.229	.118	.034	.221	.115	.034	.213	.112	.033	.206	.110	.033	
6.0	.217	.109	.031	.213	.108	.031	.206	.106	.031	.199	.103	.030	.192	.101	.030	
7.0	.203	.100	.028	.199	.099	.028	.192	.097	.028	.186	.095	.028	.180	.094	.028	
8.0	.189	.093	.026	.186	.092	.026	.180	.090	.026	.175	.088	.026	.169	.087	.025	
9.0	.178	.086	.024	.175	.085	.024	.169	.084	.024	.164	.082	.024	.159	.081	.023	
10.0	.167	.080	.022	.164	.079	.022	.160	.078	.022	.155	.077	.022	.151	.076	.022	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.194	.194	.194	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.183	.159	.138	.156	.137	.119	.107	.094	.082	.062	.054	.048	.020	.018	.015	
2.0	.175	.135	.102	.150	.116	.088	.103	.080	.061	.059	.047	.036	.019	.015	.012	
3.0	.168	.118	.077	.144	.101	.067	.099	.070	.047	.057	.041	.028	.018	.013	.009	
4.0	.161	.104	.061	.138	.090	.053	.095	.063	.037	.055	.037	.022	.018	.012	.007	
5.0	.154	.094	.050	.132	.081	.043	.091	.057	.031	.053	.033	.018	.017	.011	.006	
6.0	.147	.086	.042	.126	.074	.036	.087	.052	.026	.050	.031	.015	.016	.010	.005	
7.0	.140	.079	.036	.121	.068	.031	.083	.048	.022	.048	.028	.013	.016	.009	.004	
8.0	.134	.073	.031	.115	.063	.027	.080	.045	.019	.046	.026	.012	.015	.009	.004	
9.0	.128	.068	.028	.110	.059	.024	.076	.042	.017	.044	.025	.010	.014	.008	.003	
10.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm										
NAME: 83722					TYPE: LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: P.Q.L., Inc.								Shielding Angle:		
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	27.2	28.8	27.5	29.1	29.5	28.6	30.3	29.0	30.6	30.9
3H	28.3	29.8	28.7	30.2	30.5	29.3	30.8	29.7	31.2	31.5
4H	28.6	30.1	29.0	30.4	30.8	29.5	30.9	29.9	31.3	31.6
6H	28.9	30.2	29.3	30.5	30.9	29.6	30.9	30.0	31.2	31.7
8H	28.9	30.2	29.3	30.6	31.0	29.6	30.8	30.0	31.2	31.6
12H	28.9	30.1	29.4	30.5	31.0	29.6	30.8	30.0	31.2	31.6
4H 2H	27.7	29.2	28.1	29.5	29.9	29.0	30.4	29.4	30.7	31.1
3H	29.0	30.2	29.4	30.6	31.0	29.8	31.0	30.2	31.4	31.8
4H	29.4	30.4	29.8	30.9	31.3	30.0	31.1	30.5	31.5	32.0
6H	29.7	30.6	30.2	31.1	31.5	30.2	31.1	30.6	31.6	32.0
8H	29.8	30.6	30.3	31.1	31.6	30.2	31.1	30.7	31.5	32.0
12H	29.9	30.6	30.3	31.1	31.6	30.3	31.0	30.8	31.5	32.0
8H 4H	29.5	30.4	30.0	30.8	31.3	30.1	31.0	30.6	31.4	31.9
6H	29.9	30.6	30.4	31.1	31.6	30.3	31.0	30.8	31.5	32.0
8H	30.0	30.7	30.5	31.2	31.7	30.4	31.1	30.9	31.6	32.1
12H	30.1	30.7	30.7	31.2	31.8	30.5	31.1	31.0	31.6	32.1
12H 4H	29.5	30.3	30.0	30.8	31.2	30.1	30.9	30.6	31.4	31.9
6H	29.9	30.6	30.4	31.0	31.6	30.4	31.0	30.9	31.5	32.0
8H	30.1	30.6	30.6	31.1	31.7	30.5	31.0	31.0	31.5	32.1
CIE190: 2010										

CIE190: 2010
Area: 0.0415 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Peter li
Test Date: 13 November 2020

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity: 40.8%
Test Distance: 2.500m [K=1.0117]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

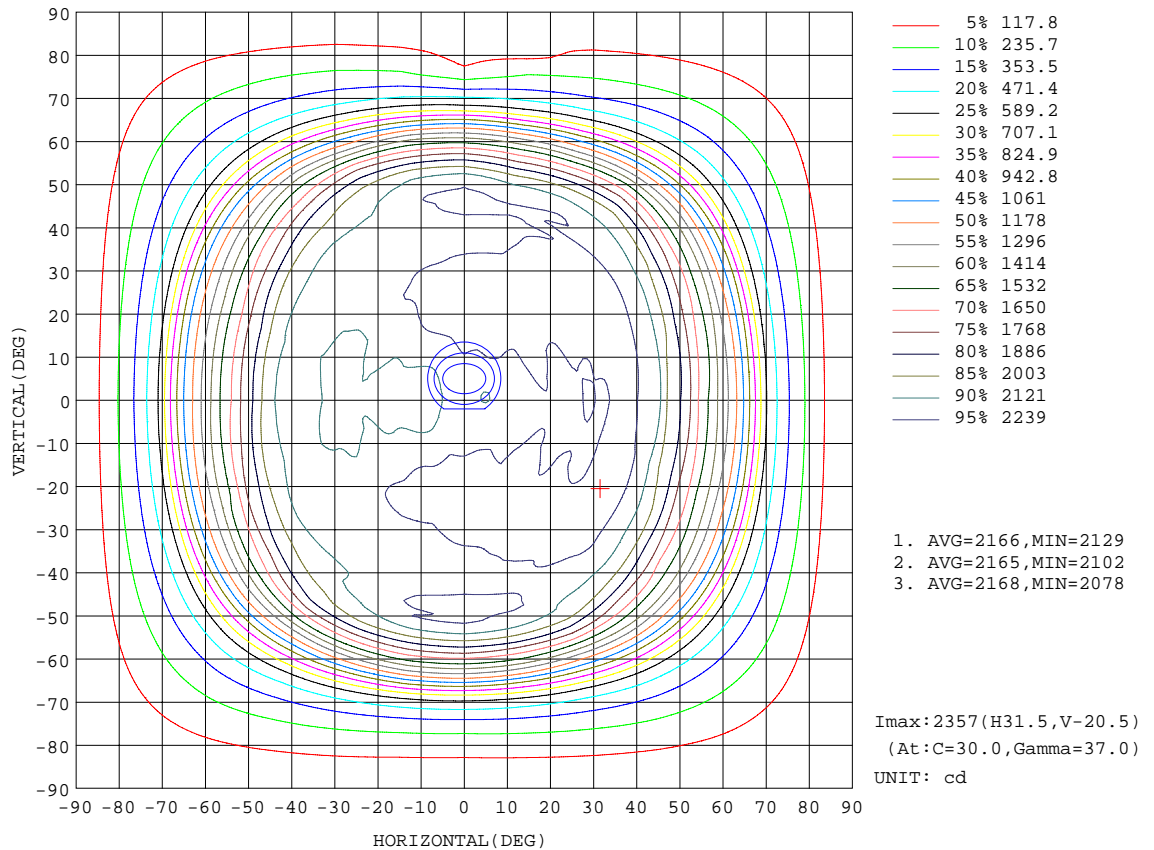
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	42	35	53	42	35	52	41	34	28
0.80	65	53	45	64	53	45	62	52	45	38
1.00	75	63	56	73	62	55	71	64	55	47
1.25	82	71	64	81	71	64	78	69	63	55
1.50	87	77	70	86	77	70	83	75	69	61
2.00	95	86	80	93	85	79	89	83	77	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:



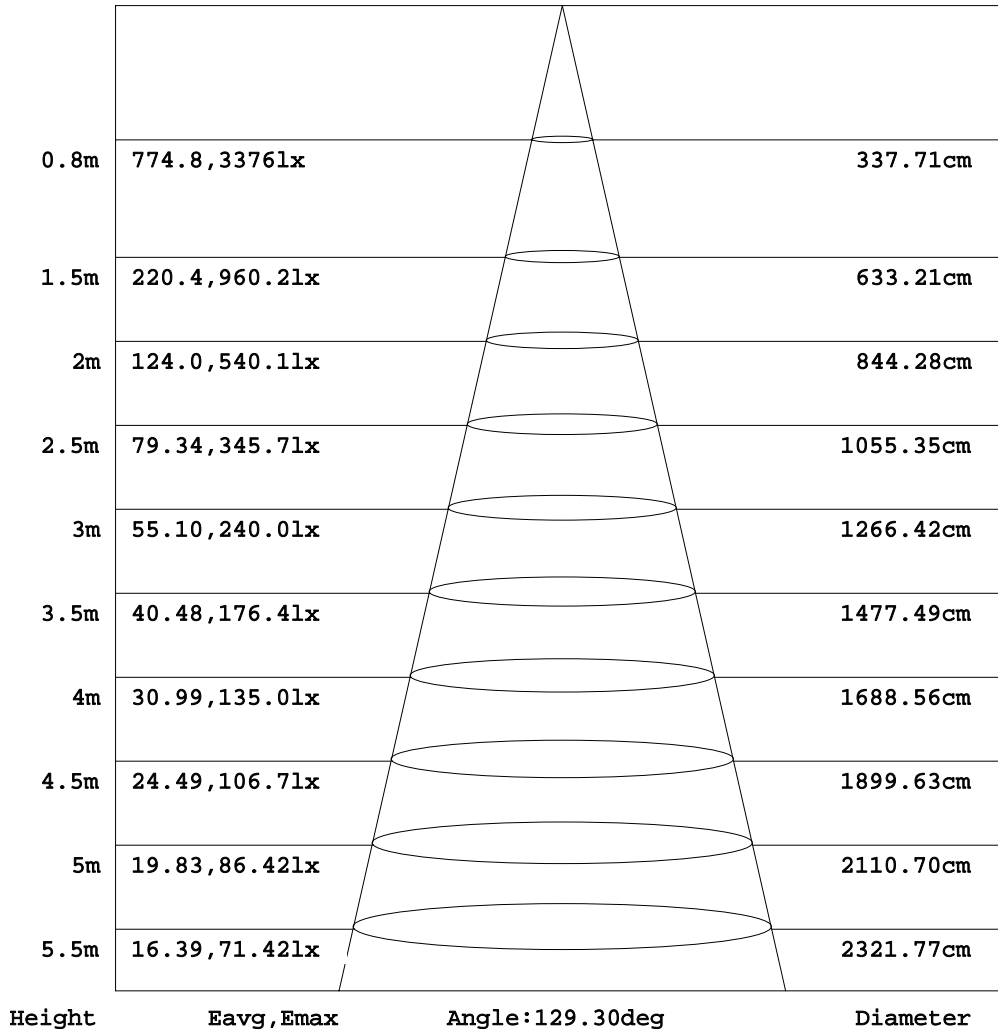
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

AAI Figure

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

Flux out:7164 lm



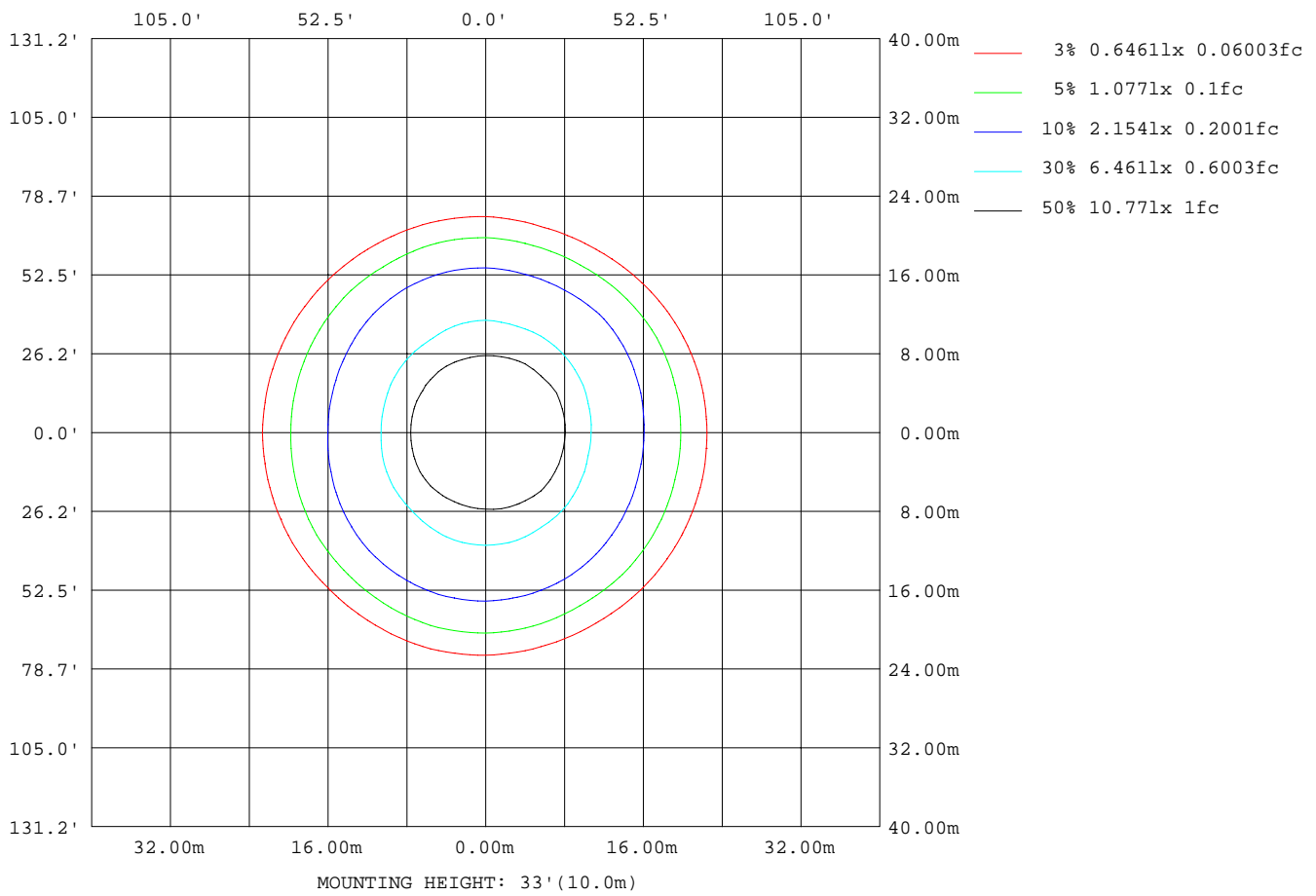
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Peter li
 Test Date:13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance:2.500m [K=1.0117]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

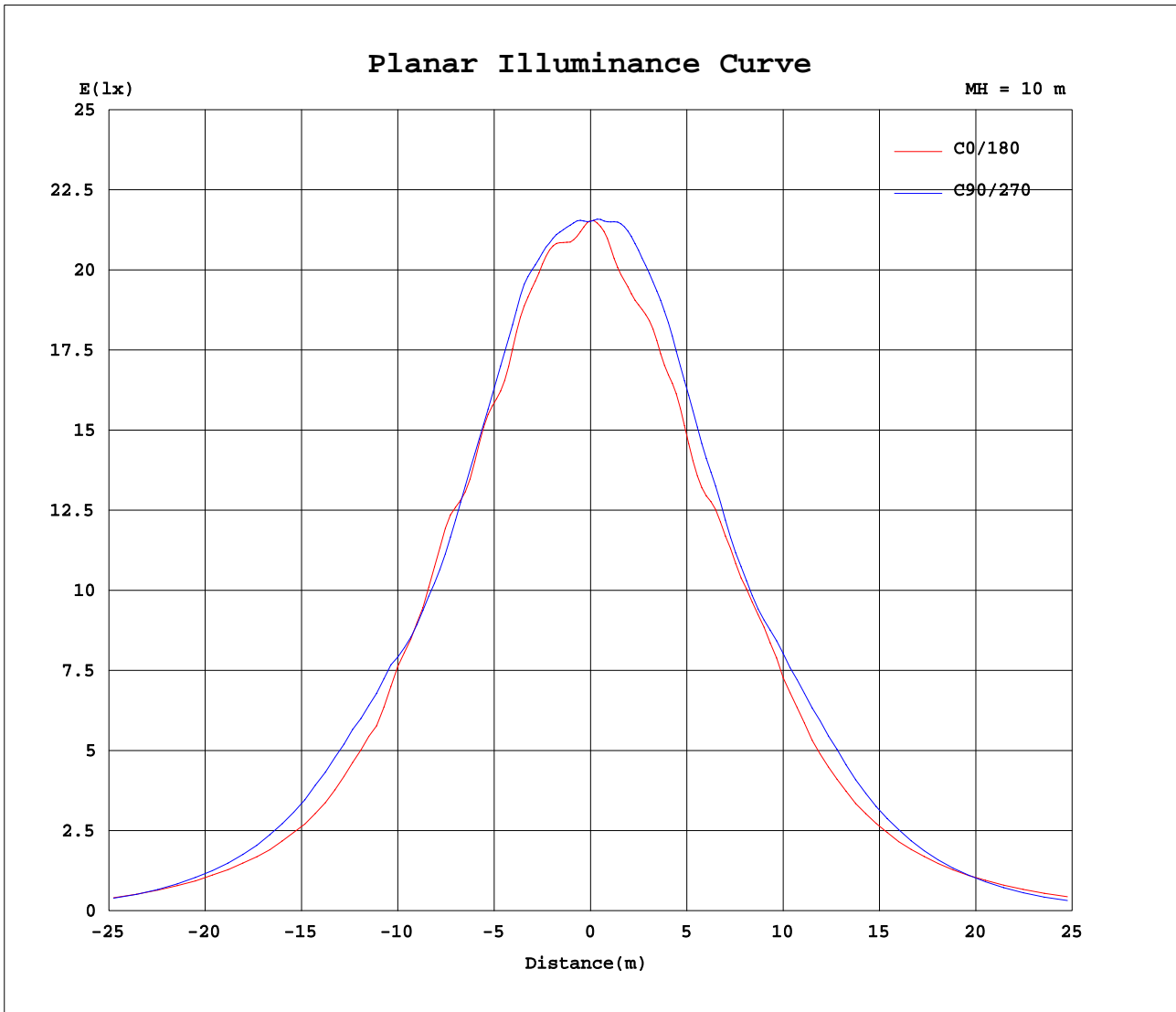
AvgL	cd/m2
L_0~180(65)av	60140
L_0~180(75)av	36439
L_0~180(85)av	27319
L_90~270(65)av	59162
L_90~270(75)av	24068
L_90~270(85)av	19015
L_45(65)av	58288
L_45(75)av	31715
L_45(85)av	25111

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Peter li
Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity: 40.8%
Test Distance: 2.500m [K=1.0117]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	2154	2153	2153	2153	2151	2153	2152	2151	2151	2150	2150	2149	2154	2153	2153	2153	2151	2153	2152
5	2118	2124	2128	2134	2141	2157	2172	2175	2168	2154	2143	2129	2122	2126	2138	2152	2162	2172	2175
10	2181	2179	2182	2180	2192	2196	2210	2226	2187	2128	2090	2066	2058	2066	2083	2119	2167	2217	2235
15	2209	2213	2205	2215	2234	2277	2257	2252	2209	2180	2133	2093	2082	2093	2122	2168	2208	2235	2260
20	2232	2235	2250	2292	2292	2295	2313	2271	2274	2194	2140	2109	2095	2104	2132	2162	2240	2285	2296
25	2179	2192	2236	2241	2331	2320	2284	2276	2284	2224	2184	2107	2106	2112	2136	2231	2232	2281	2283
30	2246	2222	2196	2327	2293	2265	2268	2236	2241	2228	2160	2098	2034	2073	2120	2168	2221	2277	2246
35	2292	2329	2330	2267	2283	2255	2219	2211	2180	2178	2200	2129	2128	2123	2153	2225	2210	2225	2218
40	2248	2248	2258	2318	2251	2208	2186	2160	2151	2189	2173	2167	2144	2152	2188	2169	2195	2190	2190
45	2158	2112	2192	2238	2209	2211	2240	2199	2146	2147	2175	2068	2056	2085	2101	2148	2139	2217	2272
50	1891	1900	1986	2068	2130	2232	2259	2224	2175	2057	1994	1904	1843	1857	1946	2007	2085	2176	2234
55	1611	1641	1720	1822	1978	2030	2077	2060	2014	1924	1760	1662	1608	1607	1704	1797	1911	1950	1945
60	1350	1368	1430	1497	1553	1604	1635	1647	1604	1557	1470	1376	1358	1353	1393	1472	1491	1528	1500
65	1046	1047	1057	1053	1042	1079	1119	1125	1092	1060	1083	1069	1063	1060	1048	1021	988	977	956
70	597	599	597	587	561	561	571	577	583	595	630	642	662	642	615	582	546	522	488
75	368	369	359	349	329	321	314	320	335	350	378	392	415	402	380	357	331	288	203
80	207	211	208	201	188	177	170	175	189	201	219	230	244	239	227	211	193	157	90.7
85	88.0	91.2	92.7	91.6	88.9	85.9	86.4	86.5	90.6	94.5	99.5	103	110	108	104	97.6	91.1	72.6	51.2
90	34.8	36.6	37.6	38.0	37.4	36.9	36.7	37.1	38.0	39.0	38.0	40.9	44.5	44.6	43.6	41.9	38.8	28.5	24.2
95	14.3	15.9	7.77	0.72	6.37	4.29	4.83	3.83	4.94	0.69	9.94	16.9	21.7	16.9	7.29	0.94	1.20	0.94	0.96
100	15.0	10.6	14.0	9.53	2.98	2.34	2.91	2.70	2.29	8.96	14.3	11.2	18.6	13.2	17.2	12.2	5.11	3.57	5.17
105	8.67	5.48	6.57	2.90	4.29	12.1	13.4	12.6	4.75	2.36	6.80	5.84	11.8	7.74	8.39	3.79	5.85	12.1	14.1
110	3.97	1.96	1.63	2.15	5.56	9.05	9.62	9.31	5.89	1.92	1.42	1.82	6.12	3.55	2.02	2.78	7.35	9.65	9.27
115	1.06	1.15	1.44	2.70	5.86	7.03	7.20	7.22	6.15	2.55	1.15	0.84	1.42	1.47	1.60	3.26	7.83	7.98	6.59
120	1.23	1.31	1.71	3.20	5.24	5.55	5.64	5.76	5.39	3.19	1.47	0.96	1.45	1.53	1.84	3.89	6.62	6.18	4.82
125	1.24	1.27	1.91	3.49	4.44	4.43	4.43	4.54	4.47	3.45	1.86	1.33	1.49	1.71	2.20	4.35	5.52	4.56	2.84
130	1.46	1.53	2.05	2.93	3.37	3.23	3.20	3.27	3.32	2.88	2.14	1.32	1.86	1.96	2.58	3.68	4.30	3.76	2.78
135	1.58	1.48	1.80	2.10	2.33	2.16	2.13	2.22	2.26	2.06	1.98	1.56	2.08	2.12	2.55	2.97	3.10	2.76	2.36
140	1.60	1.63	1.72	1.75	1.91	1.65	1.66	1.63	1.61	1.88	1.80	1.81	2.19	2.29	2.36	2.45	2.43	2.28	2.28
145	1.70	1.77	1.81	1.95	1.55	1.63	1.67	1.60	1.75	1.83	1.66	1.76	2.36	2.53	2.51	2.45	2.46	2.43	2.52
150	1.82	1.92	1.65	1.89	1.62	1.78	1.67	1.70	1.70	1.69	1.74	1.77	2.54	2.66	2.61	2.64	2.59	2.60	2.68
155	1.95	2.05	1.95	1.66	1.91	1.98	1.69	1.78	1.66	1.77	1.83	1.85	2.69	2.74	2.80	2.76	2.72	2.74	2.75
160	2.04	2.01	1.85	1.67	1.78	1.96	1.79	1.83	1.74	1.87	1.95	1.89	2.75	2.80	2.82	2.87	2.85	2.84	2.80
165	2.02	2.10	2.25	2.13	1.85	1.81	1.73	1.81	1.86	1.92	1.91	1.95	2.66	2.70	2.78	2.83	2.88	2.80	2.75
170	2.26	2.35	2.35	2.22	1.99	2.00	1.84	1.81	1.92	1.95	1.99	2.12	2.58	2.60	2.79	2.78	2.79	2.74	2.60
175	2.46	2.46	2.35	2.20	2.04	2.01	1.96	1.97	2.10	2.12	2.15	2.21	2.62	2.63	2.76	2.70	2.68	2.65	2.55
180	2.22	2.43	2.46	2.46	2.43	2.39	2.41	2.35	2.45	2.48	2.47	2.33	2.30	2.30	2.42	2.45	2.46	2.42	2.39

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.5492A P:64.28W PF:0.9753 Freq:60.01Hz Lamp Flux:8074.6x1 lm		
NAME: 83722	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: P.Q.L., Inc.		Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	2151	2151	2150	2150	2149														
5	2165	2149	2134	2124	2118														
10	2217	2214	2200	2186	2178														
15	2282	2275	2227	2218	2210														
20	2328	2300	2316	2275	2237														
25	2322	2308	2301	2245	2220														
30	2299	2292	2293	2288	2231														
35	2237	2287	2327	2289	2286														
40	2215	2265	2262	2341	2300														
45	2255	2234	2210	2232	2179														
50	2159	2182	2121	2032	1939														
55	1858	1874	1888	1786	1673														
60	1441	1424	1477	1452	1408														
65	895	906	955	1014	1031														
70	480	483	520	562	581														
75	263	282	307	334	350														
80	95.5	160	174	187	200														
85	66.4	74.3	79.5	82.0	85.9														
90	28.6	32.2	33.8	27.5	28.7														
95	1.09	1.22	1.27	20.5	14.8														
100	4.45	3.71	9.08	13.3	9.61														
105	12.2	4.99	3.01	6.22	4.88														
110	8.19	5.77	2.92	1.64	1.71														
115	6.19	5.89	3.34	1.82	1.39														
120	4.85	4.66	3.91	2.11	1.55														
125	2.97	3.75	3.91	2.41	1.76														
130	2.74	3.22	3.27	2.59	1.91														
135	2.36	2.56	2.55	2.27	2.09														
140	2.23	2.33	2.32	2.23	2.21														
145	2.45	2.46	2.45	2.37	2.34														
150	2.65	2.57	2.56	2.52	2.47														
155	2.81	2.73	2.69	2.70	2.60														
160	2.87	2.79	2.73	2.79	2.76														
165	2.84	2.75	2.64	2.75	2.73														
170	2.71	2.75	2.60	2.71	2.62														
175	2.51	2.56	2.36	2.44	2.46														
180	2.44	2.45	2.57	2.58	2.48														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	2154	2153	2153	2153	2151	2153	2152	2151	2151	2150
3.0	2128	2129	2133	2139	2147	2156	2164	2166	2164	2157
6.0	2122	2128	2130	2133	2139	2156	2175	2178	2167	2147
9.0	2164	2160	2168	2162	2171	2175	2199	2215	2182	2133
12.0	2204	2206	2198	2207	2232	2239	2228	2236	2195	2141
15.0	2209	2213	2205	2215	2234	2277	2257	2252	2209	2180
18.0	2227	2226	2247	2273	2247	2296	2301	2265	2246	2197
21.0	2222	2226	2232	2286	2316	2301	2305	2276	2279	2196
24.0	2171	2185	2219	2240	2341	2319	2288	2280	2280	2215
27.0	2227	2221	2252	2288	2315	2301	2277	2255	2278	2231
30.0	2246	2222	2196	2327	2293	2265	2268	2236	2241	2228
33.0	2217	2259	2252	2271	2290	2250	2249	2219	2217	2177
36.0	2334	2321	2357	2286	2270	2258	2202	2196	2181	2183
39.0	2287	2260	2284	2323	2262	2230	2179	2151	2155	2189
42.0	2190	2227	2246	2262	2246	2211	2177	2150	2166	2155
45.0	2158	2112	2192	2238	2209	2211	2240	2199	2146	2147
48.0	1927	1983	2050	2144	2170	2256	2266	2265	2169	2079
51.0	1857	1842	1943	2034	2111	2197	2270	2245	2138	2046
54.0	1663	1691	1771	1888	2044	2097	2131	2117	2063	1965
57.0	1516	1512	1608	1712	1843	1878	1905	1896	1868	1807
60.0	1350	1368	1430	1497	1553	1604	1635	1647	1604	1557
63.0	1194	1184	1220	1245	1245	1298	1339	1351	1300	1259
66.0	958.7	963.3	957.5	948.3	935.1	950.6	990.3	999.6	972.5	959.2
69.0	689.0	681.8	679.1	665.6	638.4	638.8	639.6	653.9	664.9	674.4
72.0	494.9	493.8	484.2	473.2	453.6	452.7	454.8	461.6	467.8	476.3
75.0	367.8	369.0	359.3	348.9	329.4	321.0	313.7	319.8	335.0	349.7
78.0	264.4	267.7	261.4	251.8	236.7	225.0	216.5	222.0	238.0	252.0
81.0	180.0	183.9	182.5	176.6	166.9	156.6	150.5	154.9	167.9	177.8
84.0	107.3	111.1	112.3	110.4	106.5	102.5	99.17	101.8	108.4	113.5
87.0	63.23	65.27	66.63	66.07	64.32	62.21	60.97	61.51	65.46	68.39
90.0	34.76	36.56	37.62	38.02	37.45	36.95	36.68	37.08	38.04	39.00
93.0	0.6632	0.7419	10.19	15.60	17.30	23.69	23.39	22.74	13.28	11.01
96.0	21.14	15.27	13.61	0.9997	0.9586	0.8478	0.8045	0.8366	0.7882	1.639
99.0	16.42	11.66	15.75	11.38	2.353	1.865	2.399	2.221	2.395	11.02
102.0	12.23	8.391	10.46	6.166	2.877	6.873	6.167	8.565	3.832	5.627
105.0	8.670	5.476	6.569	2.903	4.292	12.05	13.45	12.59	4.748	2.364
108.0	5.611	3.090	3.373	1.865	5.285	10.27	11.11	10.60	5.695	1.555
111.0	3.198	1.530	1.304	2.286	5.647	8.536	8.996	8.751	5.961	2.080
114.0	1.030	1.129	1.383	2.604	5.845	7.341	7.568	7.538	6.131	2.436
117.0	1.134	1.214	1.546	2.888	5.691	6.403	6.540	6.636	5.905	2.763
120.0	1.227	1.313	1.710	3.198	5.241	5.554	5.640	5.760	5.392	3.191
123.0	1.310	1.411	1.843	3.450	4.790	4.873	4.926	5.032	4.872	3.433
126.0	1.231	1.371	1.994	3.418	4.244	4.198	4.184	4.285	4.248	3.364
129.0	1.428	1.522	2.088	3.071	3.593	3.472	3.441	3.520	3.561	3.025
132.0	1.519	1.474	1.924	2.568	2.913	2.744	2.733	2.819	2.877	2.531
135.0	1.582	1.476	1.797	2.098	2.333	2.156	2.132	2.219	2.260	2.063
138.0	1.582	1.495	1.790	1.799	1.977	1.775	1.766	1.805	1.775	1.875
141.0	1.624	1.682	1.679	1.810	1.838	1.628	1.648	1.590	1.628	1.854
144.0	1.702	1.752	1.798	1.948	1.597	1.645	1.681	1.603	1.751	1.844
147.0	1.741	1.846	1.734	1.923	1.537	1.613	1.623	1.624	1.728	1.798
150.0	1.818	1.922	1.649	1.888	1.621	1.782	1.670	1.699	1.705	1.694
153.0	1.906	2.014	1.843	1.793	1.819	1.935	1.709	1.776	1.665	1.705
156.0	1.981	2.063	1.970	1.626	1.920	2.022	1.712	1.776	1.672	1.800
159.0	2.051	2.034	1.852	1.641	1.850	1.981	1.768	1.799	1.711	1.862
162.0	1.968	1.982	1.973	1.787	1.684	1.795	1.782	1.789	1.776	1.871
165.0	2.022	2.097	2.248	2.125	1.853	1.808	1.730	1.806	1.862	1.923
168.0	2.226	2.356	2.354	2.275	2.096	2.016	1.842	1.870	1.936	1.984
171.0	2.251	2.338	2.324	2.204	1.942	1.858	1.796	1.792	1.907	1.963
174.0	2.394	2.428	2.363	2.160	1.961	1.947	1.895	1.913	2.035	2.068
177.0	2.507	2.397	2.305	2.301	2.173	2.176	2.106	2.076	2.196	2.176
180.0	2.223	2.428	2.462	2.464	2.435	2.391	2.407	2.350	2.453	2.483
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	2150	2149	2154	2153	2153	2153	2151	2153	2152	2151
3.0	2152	2146	2144	2148	2153	2160	2163	2166	2167	2161
6.0	2132	2111	2102	2109	2127	2144	2161	2179	2186	2172
9.0	2095	2070	2060	2070	2088	2123	2164	2209	2225	2204
12.0	2096	2067	2058	2067	2091	2134	2180	2225	2248	2238
15.0	2133	2093	2082	2093	2122	2168	2208	2235	2260	2282
18.0	2138	2098	2111	2109	2115	2168	2233	2272	2281	2330
21.0	2151	2119	2093	2109	2149	2170	2238	2285	2300	2322
24.0	2189	2123	2116	2124	2152	2222	2233	2281	2291	2324
27.0	2149	2077	2061	2072	2114	2217	2242	2273	2274	2312
30.0	2160	2098	2034	2073	2120	2168	2221	2277	2246	2299

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

Photometric Data Table [cd]

33.0	2192	2102	2123	2111	2136	2201	2219	2230	2247	2275
36.0	2209	2126	2135	2137	2142	2212	2201	2209	2201	2231
39.0	2181	2169	2141	2159	2178	2179	2218	2178	2195	2214
42.0	2190	2179	2156	2142	2216	2169	2181	2178	2212	2220
45.0	2175	2068	2056	2085	2101	2148	2139	2217	2272	2255
48.0	2072	2018	1957	1947	2045	2085	2108	2233	2266	2206
51.0	1963	1853	1802	1816	1888	1967	2086	2144	2191	2118
54.0	1827	1742	1650	1662	1744	1850	1973	2032	2017	1932
57.0	1657	1534	1513	1518	1570	1673	1787	1791	1783	1709
60.0	1470	1376	1358	1353	1393	1472	1491	1528	1500	1441
63.0	1250	1211	1177	1185	1190	1214	1186	1214	1191	1134
66.0	982.6	984.7	993.6	979.4	957.6	917.5	885.5	867.4	838.2	787.5
69.0	716.0	730.2	750.1	727.2	692.2	657.3	612.4	583.2	547.6	535.5
72.0	506.8	519.6	540.2	522.2	500.8	475.0	447.2	418.1	358.5	378.2
75.0	378.4	392.2	414.9	401.9	380.0	356.7	331.1	287.8	203.3	263.0
78.0	274.6	288.2	305.5	297.5	282.5	263.3	241.2	201.7	108.4	177.0
81.0	192.7	201.6	214.1	209.9	199.9	185.3	169.2	138.8	85.83	88.89
84.0	120.1	125.0	132.5	130.3	124.7	117.0	108.6	86.00	57.84	76.99
87.0	71.66	72.74	75.46	74.87	72.38	68.73	65.68	52.05	44.30	49.06
90.0	38.00	40.91	44.46	44.65	43.63	41.90	38.79	28.54	24.22	28.64
93.0	7.723	0.7194	30.72	1.032	0.9595	12.27	13.32	12.64	14.55	10.78
96.0	15.08	15.80	24.60	17.86	20.85	1.419	2.356	1.120	1.530	1.661
99.0	16.33	12.45	20.03	14.41	19.04	13.77	4.769	2.593	4.541	3.829
102.0	10.69	8.920	15.74	10.95	13.30	8.120	5.096	9.739	9.716	12.97
105.0	6.797	5.844	11.76	7.743	8.387	3.787	5.849	12.05	14.11	12.23
108.0	3.316	3.295	8.305	5.024	4.398	2.545	6.919	10.84	10.95	9.571
111.0	1.006	1.266	5.162	2.791	1.510	2.896	7.526	9.200	8.638	7.597
114.0	1.082	0.8160	1.648	1.479	1.575	3.172	7.843	8.231	7.092	6.479
117.0	1.270	0.8954	1.389	1.459	1.665	3.459	7.298	7.282	5.787	5.579
120.0	1.472	0.9573	1.454	1.530	1.838	3.893	6.623	6.179	4.820	4.851
123.0	1.762	1.194	1.523	1.641	2.032	4.294	5.972	4.954	3.114	3.142
126.0	1.834	1.401	1.523	1.746	2.385	4.230	5.307	4.366	2.835	2.866
129.0	2.031	1.375	1.825	1.904	2.538	3.815	4.531	3.864	2.767	2.742
132.0	2.063	1.385	1.942	1.988	2.641	3.400	3.763	3.354	2.623	2.612
135.0	1.983	1.564	2.078	2.115	2.546	2.970	3.104	2.764	2.357	2.357
138.0	1.919	1.693	2.051	2.237	2.426	2.603	2.629	2.382	2.237	2.236
141.0	1.757	1.829	2.238	2.357	2.349	2.381	2.356	2.262	2.320	2.246
144.0	1.698	1.803	2.323	2.480	2.491	2.426	2.430	2.378	2.472	2.386
147.0	1.632	1.737	2.444	2.609	2.512	2.527	2.515	2.502	2.607	2.553
150.0	1.736	1.775	2.545	2.664	2.606	2.642	2.591	2.605	2.680	2.645
153.0	1.833	1.812	2.644	2.693	2.744	2.719	2.652	2.680	2.726	2.726
156.0	1.863	1.845	2.707	2.765	2.819	2.789	2.756	2.760	2.762	2.865
159.0	1.949	1.890	2.740	2.805	2.833	2.860	2.838	2.825	2.792	2.903
162.0	1.896	1.902	2.687	2.756	2.797	2.869	2.867	2.834	2.788	2.812
165.0	1.914	1.949	2.658	2.696	2.782	2.834	2.885	2.796	2.747	2.836
168.0	2.065	2.088	2.596	2.644	2.817	2.808	2.838	2.768	2.668	2.788
171.0	1.970	2.117	2.607	2.614	2.783	2.772	2.770	2.732	2.600	2.673
174.0	2.090	2.215	2.646	2.648	2.766	2.731	2.701	2.670	2.539	2.515
177.0	2.203	2.241	2.519	2.524	2.638	2.637	2.614	2.598	2.484	2.500
180.0	2.468	2.327	2.302	2.303	2.416	2.450	2.463	2.420	2.394	2.441
G/C	300.0	315.0	330.0	345.0						
0.0	2151	2150	2150	2149						
3.0	2152	2141	2132	2128						
6.0	2153	2136	2128	2120						
9.0	2191	2181	2166	2165						
12.0	2252	2225	2197	2192						
15.0	2275	2227	2218	2210						
18.0	2284	2267	2276	2248						
21.0	2307	2332	2259	2217						
24.0	2310	2311	2226	2202						
27.0	2299	2294	2299	2242						
30.0	2292	2293	2288	2231						
33.0	2294	2321	2299	2263						
36.0	2285	2301	2322	2285						
39.0	2274	2261	2349	2312						
42.0	2232	2286	2271	2205						
45.0	2234	2210	2232	2179						
48.0	2220	2194	2110	2031						
51.0	2123	2072	2004	1895						
54.0	1954	1956	1833	1736						
57.0	1713	1751	1650	1608						
60.0	1424	1477	1452	1408						
63.0	1123	1167	1202	1189						
66.0	794.9	854.9	910.6	954.0						

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks:

Photometric Data Table [cd]

69.0	537.7	584.8	633.3	657.8
72.0	389.3	423.1	457.5	475.9
75.0	281.6	307.3	333.9	350.2
78.0	204.7	222.0	238.9	253.2
81.0	142.2	152.7	163.2	172.7
84.0	89.32	95.46	99.49	104.7
87.0	52.64	55.23	57.55	59.95
90.0	32.23	33.85	27.51	28.74
93.0	9.836	0.8567	4.600	0.9579
96.0	1.698	3.240	19.35	13.76
99.0	4.070	10.63	15.15	10.68
102.0	5.062	6.181	10.28	7.608
105.0	4.988	3.007	6.222	4.878
108.0	5.438	2.739	2.858	2.724
111.0	5.827	2.981	1.605	1.503
114.0	6.001	3.200	1.757	1.372
117.0	5.472	3.471	1.924	1.453
120.0	4.659	3.911	2.114	1.545
123.0	3.941	4.075	2.270	1.678
126.0	3.669	3.805	2.476	1.801
129.0	3.395	3.416	2.615	1.866
132.0	2.884	2.950	2.448	1.968
135.0	2.564	2.551	2.270	2.092
138.0	2.384	2.355	2.211	2.152
141.0	2.350	2.326	2.245	2.229
144.0	2.439	2.425	2.339	2.310
147.0	2.512	2.480	2.426	2.394
150.0	2.573	2.563	2.518	2.474
153.0	2.651	2.641	2.610	2.524
156.0	2.771	2.701	2.728	2.657
159.0	2.802	2.724	2.775	2.751
162.0	2.755	2.730	2.779	2.741
165.0	2.745	2.643	2.755	2.732
168.0	2.791	2.612	2.707	2.712
171.0	2.753	2.600	2.733	2.590
174.0	2.607	2.408	2.475	2.487
177.0	2.516	2.358	2.439	2.485
180.0	2.448	2.567	2.580	2.484

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Peter li
 Test Date: 13 November 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.8%
 Test Distance: 2.500m [K=1.0117]
 Remarks: