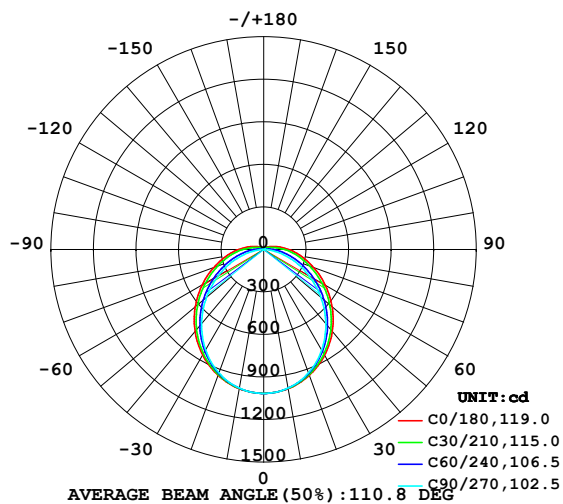


LUMINAIRE PHOTOMETRIC TEST REPORT

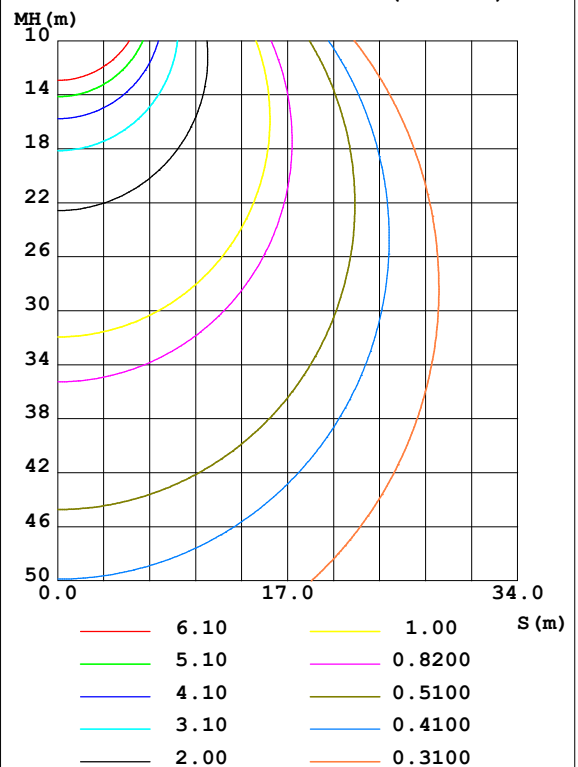
Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 174.23 lm/W			
MODEL		I _{max} (cd)	1016	S/MH (C0/180)	1.26
NOMINAL POWER (W)	18	LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	3187.6	η UP, DN (C0-180)	2.9, 47.1
NOMINAL FLUX (lm)	3187.62	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.9, 47.1
LAMPS INSIDE	1	η up (%)	5.7	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	94.3	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC
Test Date: 2019-12-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 53.0%
Test Distance: 10.380m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	997.4	995.1	993.2	995.1	997.4	995.1	993.2	995.1	0- 10	95.96	95.96	3.01,3.01
20	944.1	935.1	926.3	935.1	944.1	935.1	926.3	935.1	10- 20	273.5	369.5	11.6,11.6
30	860.9	841.2	819.5	841.2	860.9	841.2	819.5	841.2	20- 30	410.8	780.3	24.5,24.5
40	753.9	720.0	682.5	720.0	753.9	720.0	682.5	720.0	30- 40	489.4	1270	39.8,39.8
50	630.5	583.7	527.7	583.7	630.5	583.7	527.7	583.7	40- 50	502.6	1772	55.6,55.6
60	501.5	444.0	368.3	444.0	501.5	444.0	368.3	444.0	50- 60	456.4	2229	69.9,69.9
70	376.4	311.3	216.5	311.3	376.4	311.3	216.5	311.3	60- 70	366.8	2596	81.4,81.4
80	266.5	197.9	78.65	197.9	266.5	197.9	78.65	197.9	70- 80	256.6	2852	89.5,89.5
90	176.8	111.2	1.503	111.2	176.8	111.2	1.503	111.2	80- 90	152.4	3005	94.3,94.3
100	109.7	54.44	2.208	54.44	109.7	54.44	2.208	54.44	90-100	82.22	3087	96.8,96.8
110	64.61	28.28	3.188	28.28	64.61	28.28	3.188	28.28	100-110	43.52	3130	98.2,98.2
120	37.28	16.02	4.218	16.02	37.28	16.02	4.218	16.02	110-120	23.42	3154	98.9,98.9
130	20.75	10.59	5.245	10.59	20.75	10.59	5.245	10.59	120-130	13.25	3167	99.4,99.4
140	14.09	8.507	6.305	8.507	14.09	8.507	6.305	8.507	130-140	8.150	3175	99.6,99.6
150	10.13	7.929	7.285	7.929	10.13	7.929	7.285	7.929	140-150	5.487	3181	99.8,99.8
160	8.581	8.069	8.109	8.069	8.581	8.069	8.109	8.069	150-160	3.800	3184	99.9,99.9
170	8.617	8.525	8.576	8.525	8.617	8.525	8.576	8.525	160-170	2.370	3187	100,100
180	9.004	8.916	8.950	8.916	9.004	8.916	8.950	8.916	170-180	0.8345	3188	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1523.3 lm

%lum = 47.8%

%lamp = 47.8%

Conical surface Flux(120deg): 2228.7 lm

%lum = 69.9%

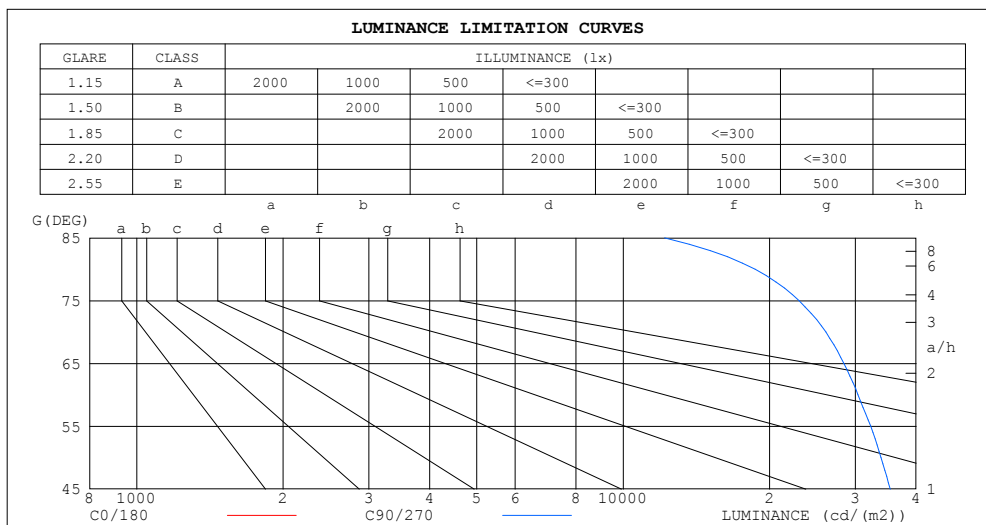
%lamp = 69.9%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	104319	12165
80	63695	18693
75	51195	22998
70	45670	26123
65	43031	28440
60	41625	30405
55	40941	32277
50	40705	33887
45	40692	35397

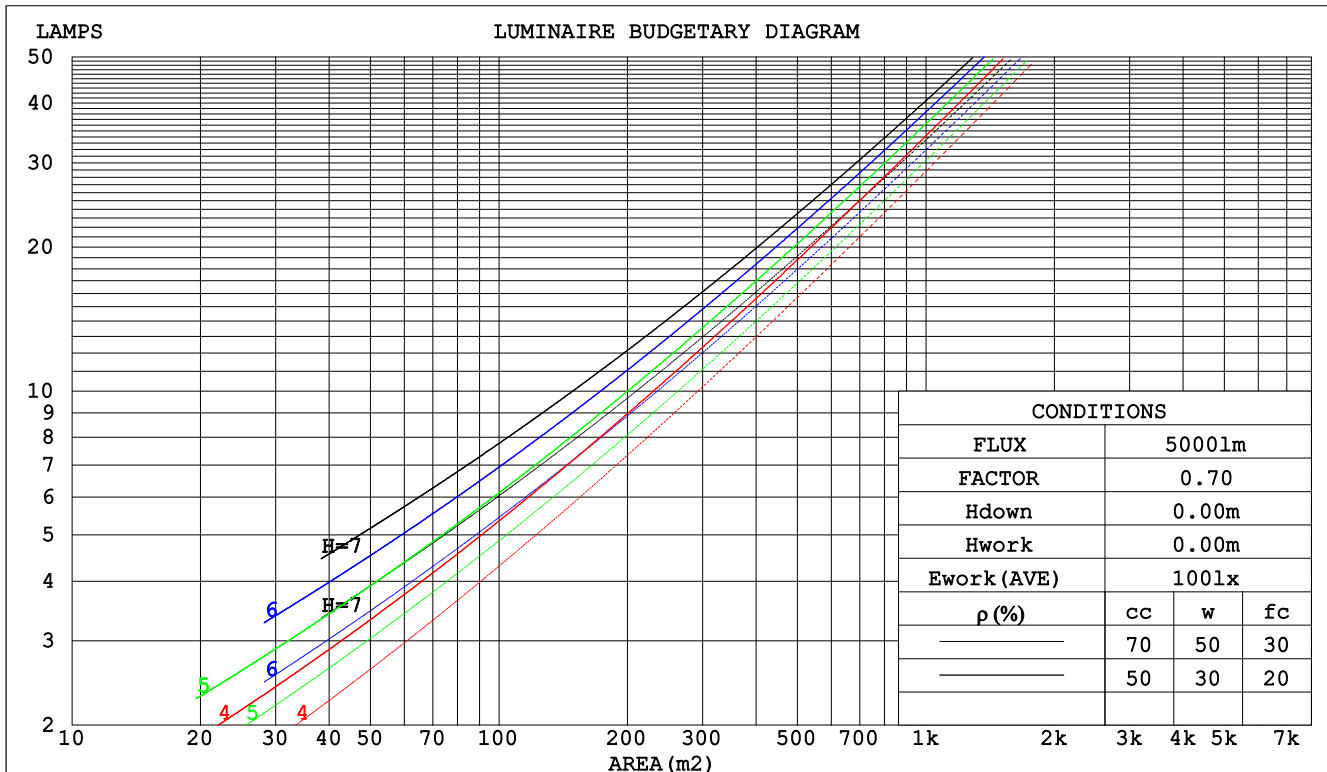
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC
Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	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	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1.0	1.01	.96	.92	.98	.93	.90	.92	.89	.86	.88	.85	.82	.83	.81	.79	.76
2.0	.87	.80	.74	.85	.78	.72	.80	.75	.70	.76	.71	.67	.72	.68	.65	.62
3.0	.76	.68	.61	.74	.66	.60	.70	.64	.58	.67	.61	.56	.64	.59	.55	.52
4.0	.67	.58	.51	.66	.57	.51	.62	.55	.49	.59	.53	.48	.57	.51	.47	.44
5.0	.60	.51	.44	.59	.50	.44	.56	.48	.43	.53	.47	.42	.51	.45	.41	.38
6.0	.54	.45	.39	.53	.44	.38	.51	.43	.37	.48	.42	.37	.46	.40	.36	.34
7.0	.49	.40	.34	.48	.40	.34	.46	.38	.33	.44	.37	.32	.42	.36	.32	.30
8.0	.45	.36	.30	.44	.36	.30	.42	.35	.29	.40	.34	.29	.39	.33	.28	.26
9.0	.41	.33	.27	.40	.32	.27	.39	.32	.27	.37	.31	.26	.36	.30	.26	.24
10.0	.38	.30	.25	.37	.30	.24	.36	.29	.24	.34	.28	.24	.33	.27	.23	.22



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	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						Wall Exitance Coeffcients(WEC)										
0.0																	
1.0	.344	.196	.062	.335	.191	.061	.319	.183	.058	.303	.175	.056	.289	.168	.054		
2.0	.310	.170	.052	.302	.166	.051	.287	.159	.050	.273	.153	.048	.260	.147	.046		
3.0	.280	.149	.045	.273	.146	.044	.260	.141	.043	.248	.136	.042	.236	.131	.041		
4.0	.256	.133	.039	.249	.131	.039	.238	.126	.038	.226	.122	.037	.216	.117	.036		
5.0	.235	.120	.035	.229	.118	.034	.218	.114	.033	.208	.110	.033	.199	.106	.032		
6.0	.216	.108	.031	.211	.107	.031	.202	.103	.030	.193	.100	.029	.184	.097	.029		
7.0	.201	.099	.028	.196	.098	.028	.187	.095	.027	.179	.092	.027	.172	.089	.026		
8.0	.187	.091	.026	.183	.090	.025	.175	.087	.025	.167	.085	.024	.161	.082	.024		
9.0	.175	.085	.024	.171	.083	.023	.164	.081	.023	.157	.079	.023	.151	.077	.022		
10.0	.164	.079	.022	.161	.078	.022	.154	.075	.021	.148	.073	.021	.142	.071	.021		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.234	.234	.234	.200	.200	.200	.137	.137	.137	.078	.078	.078	.025	.025	.025	
1.0	.227	.200	.176	.194	.172	.151	.133	.118	.105	.076	.068	.061	.024	.022	.020	
2.0	.219	.176	.140	.188	.152	.121	.129	.105	.085	.074	.061	.050	.024	.020	.016	
3.0	.211	.159	.117	.181	.137	.102	.124	.095	.071	.072	.056	.042	.023	.018	.014	
4.0	.203	.146	.102	.174	.126	.089	.120	.088	.063	.069	.051	.037	.022	.017	.012	
5.0	.196	.136	.092	.168	.117	.080	.116	.082	.056	.067	.048	.033	.022	.016	.011	
6.0	.188	.128	.084	.162	.110	.073	.112	.077	.052	.065	.045	.031	.021	.015	.010	
7.0	.181	.121	.078	.156	.105	.068	.108	.073	.048	.063	.043	.029	.020	.014	.010	
8.0	.175	.115	.074	.150	.100	.064	.104	.070	.046	.061	.041	.027	.020	.014	.009	
9.0	.169	.110	.071	.145	.096	.062	.101	.067	.044	.059	.040	.026	.019	.013	.009	
10.0	.163	.106	.068	.140	.092	.059	.097	.065	.042	.057	.038	.025	.018	.013	.008	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC
Test Date:2019-12-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm											
NAME: L60G-1840K1200-1102835R8						TYPE:		WEIGHT:			
SPEC.:						DIM.:		SERIAL No.:			
MFR.: ERVAN						SUR.:		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	21.5	23.0	21.8	23.3	23.6	20.2	21.7	20.6	22.0	22.3	
	3H	23.6	24.9	23.9	25.3	25.6	21.5	22.9	21.9	23.2	23.6
	4H	24.6	25.9	25.0	26.3	26.7	22.0	23.3	22.4	23.7	24.0
	6H	25.8	27.0	26.2	27.4	27.8	22.3	23.5	22.7	23.9	24.3
	8H	26.4	27.6	26.8	28.0	28.4	22.4	23.6	22.8	24.0	24.4
	12H	27.1	28.2	27.5	28.6	29.1	22.4	23.6	22.9	24.0	24.4
4H	2H	22.0	23.3	22.4	23.7	24.1	21.0	22.3	21.4	22.7	23.1
	3H	24.3	25.5	24.8	25.9	26.3	22.6	23.7	23.0	24.1	24.5
	4H	25.6	26.6	26.0	27.0	27.5	23.2	24.3	23.7	24.7	25.1
	6H	26.9	27.9	27.4	28.3	28.8	23.7	24.6	24.2	25.1	25.5
	8H	27.7	28.5	28.2	29.0	29.5	23.8	24.7	24.3	25.1	25.6
	12H	28.5	29.3	29.0	29.8	30.3	23.9	24.7	24.4	25.1	25.7
8H	4H	25.9	26.7	26.4	27.2	27.7	23.9	24.7	24.4	25.2	25.7
	6H	27.5	28.2	28.0	28.7	29.3	24.6	25.3	25.1	25.8	26.4
	8H	28.4	29.1	29.0	29.6	30.2	24.9	25.5	25.4	26.0	26.6
	12H	29.5	30.1	30.1	30.6	31.2	25.0	25.6	25.6	26.1	26.8
12H	4H	25.9	26.7	26.4	27.2	27.7	24.1	24.9	24.6	25.3	25.9
	6H	27.6	28.2	28.1	28.8	29.3	24.9	25.6	25.5	26.1	26.7
	8H	28.6	29.2	29.2	29.7	30.3	25.3	25.9	25.9	26.4	27.0
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.3					

CIE Pub.117, 3188 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 4.0$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC
Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

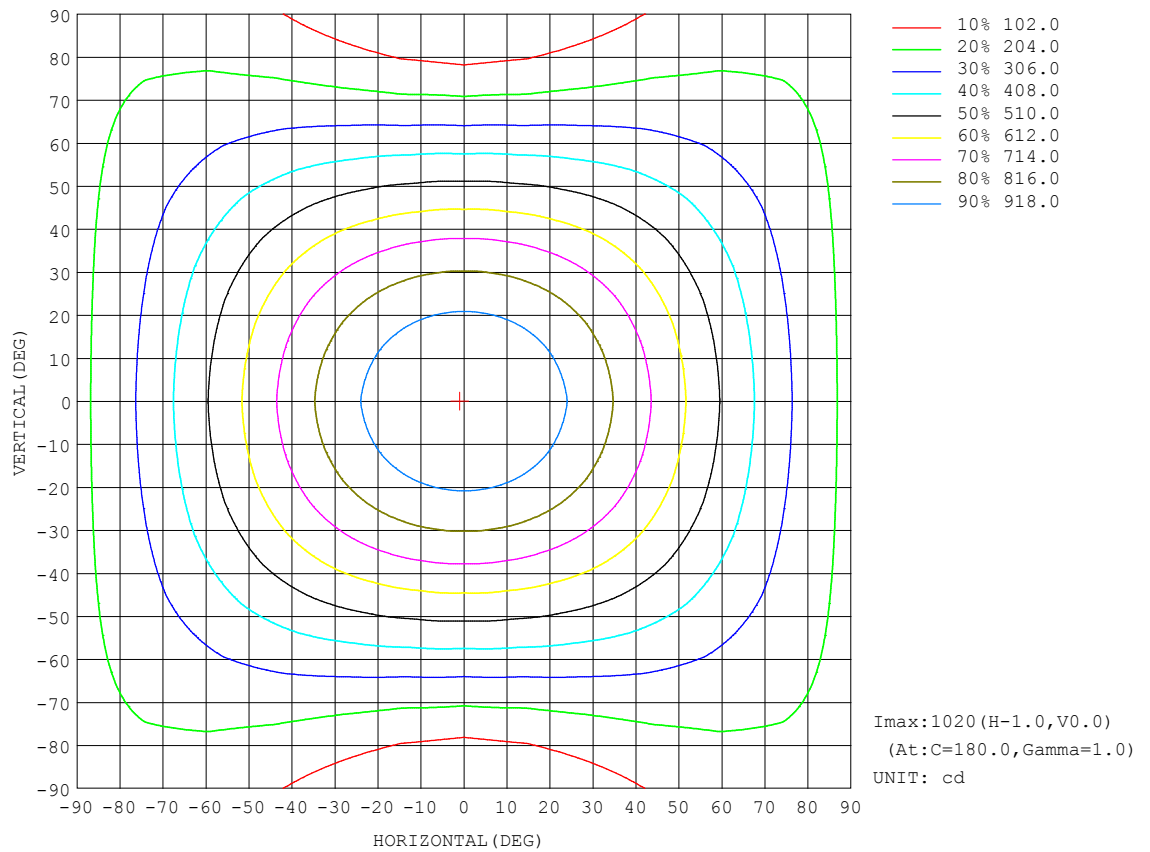
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	42	36	52	42	35	29
0.80	64	52	45	63	52	44	61	51	44	37
1.00	72	61	53	71	60	52	68	61	52	44
1.25	79	68	60	77	67	60	74	65	59	51
1.50	84	73	66	82	72	65	79	70	64	55
2.00	91	81	74	89	80	73	85	77	72	62
2.50	95	86	80	93	85	78	88	81	76	66
3.00	99	91	84	96	89	83	91	85	80	70
4.00	103	96	91	100	94	89	95	90	86	75
5.00	105	100	95	102	97	93	97	93	89	78
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: QC
 Test Date: 2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

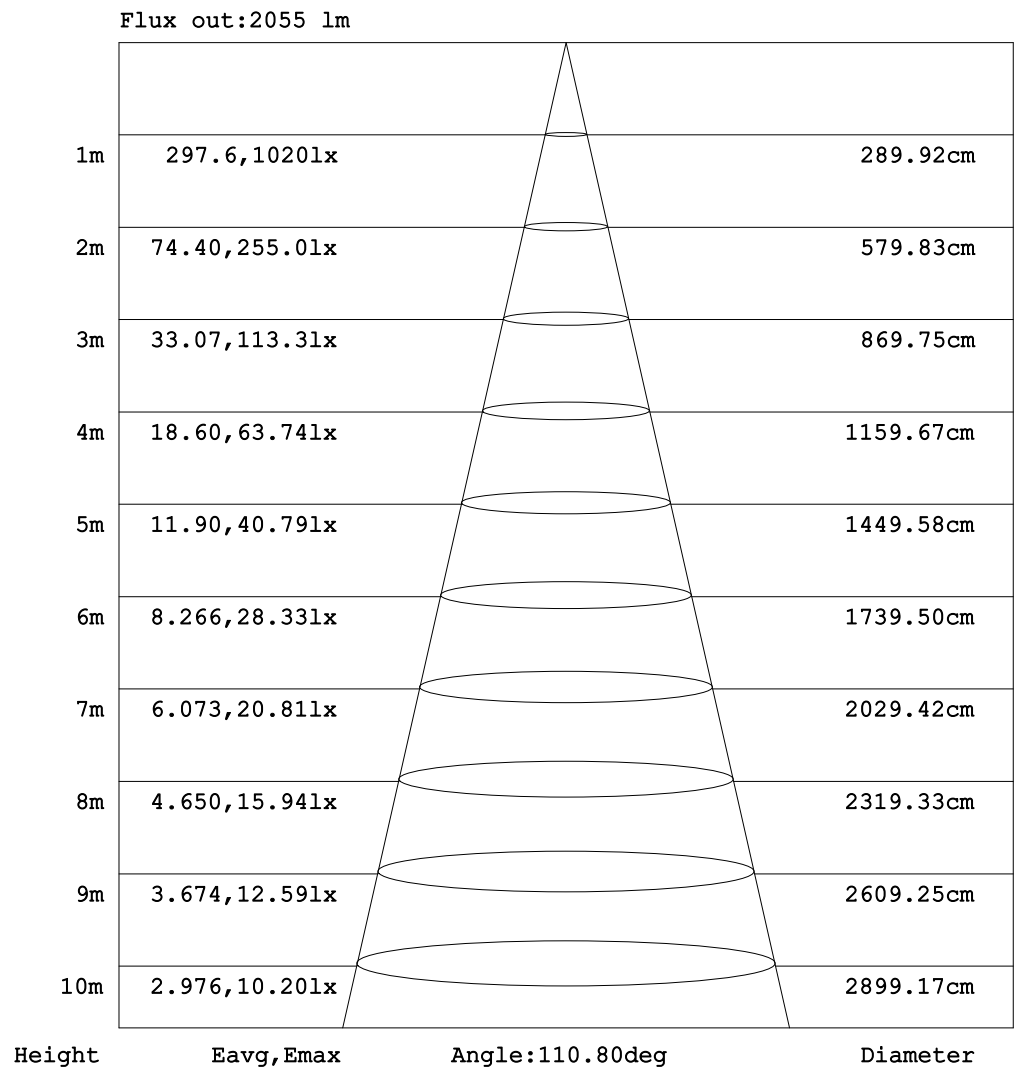


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC
Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



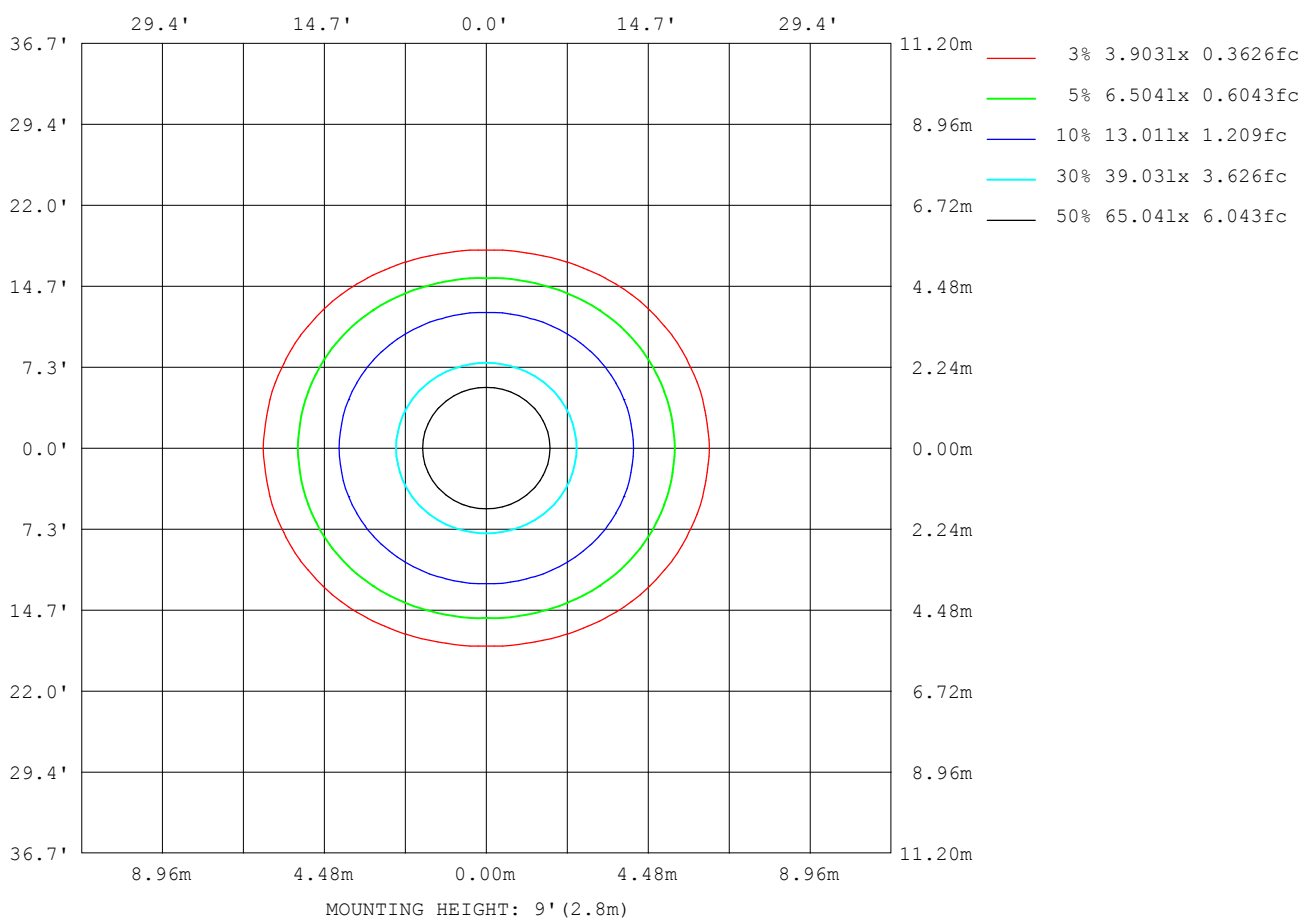
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QC
 Test Date: 2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC
Test Date: 2019-12-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 53.0%
Test Distance: 10.380m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

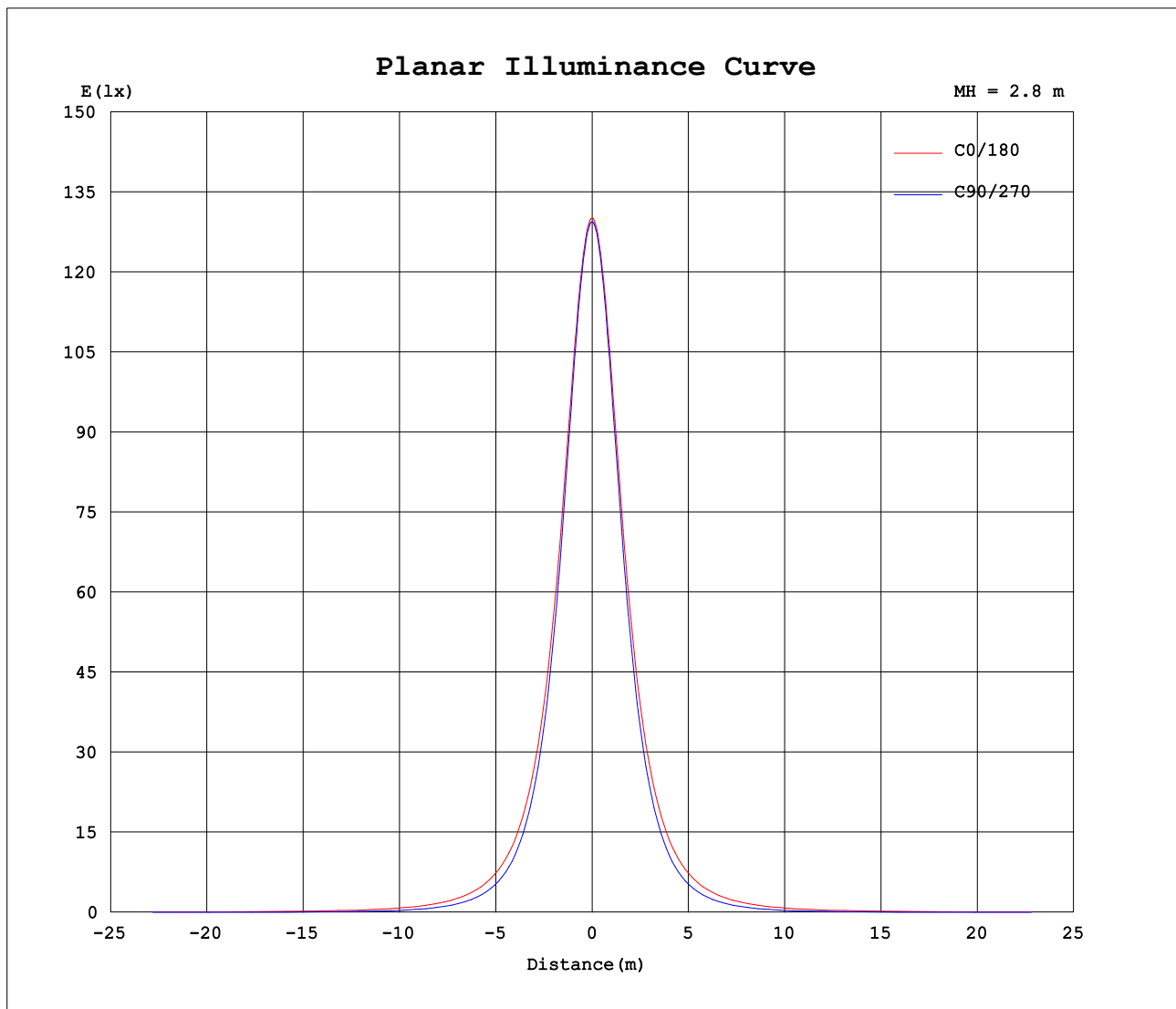
AvgL	cd/m2
L_0~180 (65) av	42850
L_0~180 (75) av	50980
L_0~180 (85) av	103880
L_90~270 (65) av	28473
L_90~270 (75) av	23024
L_90~270 (85) av	12179
L_45 (65) av	36708
L_45 (75) av	40169
L_45 (85) av	71329

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC
Test Date: 2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 53.0%
Test Distance: 10.380m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	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	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016
5	1011	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1011	1010	1010	1010	1010	1010	1010
10	997	997	996	995	994	993	993	993	994	995	996	997	997	997	996	995	994	993	993
15	975	974	972	970	968	965	965	965	968	970	972	974	975	974	972	970	968	965	965
20	944	943	939	935	931	927	926	927	931	935	939	943	944	943	939	935	931	927	926
25	906	904	899	892	885	879	878	879	885	892	899	904	906	904	899	892	885	879	878
30	861	858	851	841	830	822	820	822	830	841	851	858	861	858	851	841	830	822	820
35	810	806	796	783	769	758	754	758	769	783	796	806	810	806	796	783	769	758	754
40	754	749	737	720	701	687	682	687	701	720	737	749	754	749	737	720	701	687	682
45	693	688	674	653	630	612	606	612	630	653	674	688	693	688	674	653	630	612	606
50	631	625	608	584	557	535	528	535	557	584	608	625	631	625	608	584	557	535	528
55	566	560	541	514	482	457	449	457	482	514	541	560	566	560	541	514	482	457	449
60	502	495	475	444	407	379	368	379	407	444	475	495	502	495	475	444	407	379	368
65	438	430	409	375	336	303	291	303	336	375	409	430	438	430	409	375	336	303	291
70	376	369	347	311	268	231	216	231	268	311	347	369	376	369	347	311	268	231	216
75	319	312	289	252	205	162	144	162	205	252	289	312	319	312	289	252	205	162	144
80	267	259	236	198	149	101	78.6	101	149	198	236	259	267	259	236	198	149	101	78.6
85	219	212	189	150	101	52.7	25.7	52.7	101	150	189	212	219	212	189	150	101	52.7	25.7
90	177	170	148	111	65.3	22.5	1.50	22.5	65.3	111	148	170	177	170	148	111	65.3	22.5	1.50
95	140	134	113	76.7	39.2	9.44	1.80	9.44	39.2	76.7	113	134	140	134	113	76.7	39.2	9.44	1.80
100	110	102	82.9	54.4	24.9	5.61	2.21	5.61	24.9	54.4	82.9	102	110	102	82.9	54.4	24.9	5.61	2.21
105	84.6	77.8	60.7	39.0	16.8	4.50	2.69	4.50	16.8	39.0	60.7	77.8	84.6	77.8	60.7	39.0	16.8	4.50	2.69
110	64.6	57.8	45.2	28.3	12.2	4.22	3.19	4.22	12.2	28.3	45.2	57.8	64.6	57.8	45.2	28.3	12.2	4.22	3.19
115	49.1	43.3	34.2	21.0	9.58	4.30	3.70	4.30	9.58	21.0	34.2	43.3	49.1	43.3	34.2	21.0	9.58	4.30	3.70
120	37.3	33.4	26.0	16.0	8.05	4.57	4.22	4.57	8.05	16.0	26.0	33.4	37.3	33.4	26.0	16.0	8.05	4.57	4.22
125	27.6	26.0	20.0	12.7	7.26	4.91	4.73	4.91	7.26	12.7	20.0	26.0	27.6	26.0	20.0	12.7	7.26	4.91	4.73
130	20.8	20.4	15.7	10.6	6.88	5.33	5.24	5.33	6.88	10.6	15.7	20.4	20.8	20.4	15.7	10.6	6.88	5.33	5.24
135	17.2	16.2	12.8	9.30	6.80	5.81	5.77	5.81	6.80	9.30	12.8	16.2	17.2	16.2	12.8	9.30	6.80	5.81	5.77
140	14.1	13.3	10.8	8.51	6.88	6.32	6.31	6.32	6.88	8.51	10.8	13.3	14.1	13.3	10.8	8.51	6.88	6.32	6.31
145	11.8	11.1	9.55	8.11	7.07	6.83	6.80	6.83	7.07	8.11	9.55	11.1	11.8	11.1	9.55	8.11	7.07	6.83	6.80
150	10.1	9.63	8.80	7.93	7.32	7.31	7.28	7.31	7.32	7.93	8.80	9.63	10.1	9.63	8.80	7.93	7.32	7.31	7.28
155	9.19	8.86	8.42	7.92	7.69	7.75	7.73	7.75	7.69	7.92	8.42	8.86	9.19	8.86	8.42	7.92	7.69	7.75	7.73
160	8.58	8.46	8.27	8.07	8.07	8.16	8.11	8.16	8.07	8.07	8.27	8.46	8.58	8.46	8.27	8.07	8.07	8.16	8.11
165	8.40	8.35	8.36	8.32	8.36	8.45	8.39	8.45	8.36	8.32	8.36	8.35	8.40	8.35	8.36	8.32	8.36	8.45	8.39
170	8.62	8.53	8.54	8.53	8.57	8.64	8.58	8.64	8.57	8.53	8.54	8.53	8.62	8.53	8.54	8.53	8.57	8.64	8.58
175	8.79	8.74	8.78	8.80	8.87	8.99	8.84	8.99	8.87	8.80	8.78	8.74	8.79	8.74	8.78	8.80	8.87	8.99	8.84
180	9.00	8.93	8.93	8.92	8.98	9.06	8.95	9.06	8.98	8.92	8.93	8.93	9.00	8.93	8.93	8.92	8.98	9.06	8.95

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC
Test Date:2019-12-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:53.0%
Test Distance:10.380m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.3V I:0.0868A P:18.29W PF:0.9151 Freq:49.99Hz Lamp Flux:3187.62x1 lm		
NAME: L60G-1840K1200-1102835R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

Table--2

UNIT: cd

γ (DEG) \ C (DEG)	285	300	315	330	345														
0	1016	1016	1016	1016	1016														
5	1010	1010	1010	1010	1010														
10	993	994	995	996	997														
15	965	968	970	972	974														
20	927	931	935	939	943														
25	879	885	892	899	904														
30	822	830	841	851	858														
35	758	769	783	796	806														
40	687	701	720	737	749														
45	612	630	653	674	688														
50	535	557	584	608	625														
55	457	482	514	541	560														
60	379	407	444	475	495														
65	303	336	375	409	430														
70	231	268	311	347	369														
75	162	205	252	289	312														
80	101	149	198	236	259														
85	52.7	101	150	189	212														
90	22.5	65.3	111	148	170														
95	9.44	39.2	76.7	113	134														
100	5.61	24.9	54.4	82.9	102														
105	4.50	16.8	39.0	60.7	77.8														
110	4.22	12.2	28.3	45.2	57.8														
115	4.30	9.58	21.0	34.2	43.3														
120	4.57	8.05	16.0	26.0	33.4														
125	4.91	7.26	12.7	20.0	26.0														
130	5.33	6.88	10.6	15.7	20.4														
135	5.81	6.80	9.30	12.8	16.2														
140	6.32	6.88	8.51	10.8	13.3														
145	6.83	7.07	8.11	9.55	11.1														
150	7.31	7.32	7.93	8.80	9.63														
155	7.75	7.69	7.92	8.42	8.86														
160	8.16	8.07	8.07	8.27	8.46														
165	8.45	8.36	8.32	8.36	8.35														
170	8.64	8.57	8.53	8.54	8.53														
175	8.99	8.87	8.80	8.78	8.74														
180	9.06	8.98	8.92	8.93	8.93														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 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	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016
3.0	1014	1013	1013	1014	1014	1013	1014	1013	1014	1014
6.0	1009	1009	1008	1008	1008	1007	1008	1007	1008	1008
9.0	1001	1000	999.5	999.0	998.2	997.3	997.6	997.3	998.2	999.0
12.0	989.3	988.8	987.5	986.2	984.6	983.4	983.3	983.4	984.6	986.2
15.0	974.8	973.7	972.0	969.9	967.5	965.4	965.2	965.4	967.5	969.9
18.0	957.6	956.1	953.5	950.1	946.7	943.7	943.1	943.7	946.7	950.1
21.0	937.4	935.6	931.9	927.3	922.1	918.5	917.4	918.5	922.1	927.3
24.0	914.3	912.4	907.7	901.3	894.6	889.7	888.1	889.7	894.6	901.3
27.0	888.7	886.5	880.5	872.7	863.8	857.6	855.4	857.6	863.8	872.7
30.0	860.9	858.1	850.8	841.2	830.3	822.4	819.5	822.4	830.3	841.2
33.0	830.9	827.4	818.9	807.0	794.3	784.5	781.2	784.5	794.3	807.0
36.0	798.8	795.2	784.9	770.9	755.7	744.3	740.3	744.3	755.7	770.9
39.0	765.2	760.9	749.5	733.0	715.3	701.7	697.1	701.7	715.3	733.0
42.0	730.3	725.4	712.5	693.6	673.3	657.8	652.7	657.8	673.3	693.6
45.0	693.4	688.2	674.1	653.2	630.2	612.5	606.4	612.5	630.2	653.2
48.0	655.8	650.3	634.8	611.8	586.2	566.4	559.5	566.4	586.2	611.8
51.0	618.0	611.9	594.8	569.6	541.7	519.6	512.1	519.6	541.7	569.6
54.0	578.9	572.7	554.9	527.6	496.9	472.8	464.3	472.8	496.9	527.6
57.0	540.1	533.5	514.6	485.5	452.3	426.0	416.0	426.0	452.3	485.5
60.0	501.5	494.8	474.8	444.0	407.5	378.9	368.3	378.9	407.5	444.0
63.0	463.5	456.1	435.1	402.6	364.1	333.4	321.9	333.4	364.1	402.6
66.0	425.9	418.1	396.2	362.3	322.1	288.6	276.1	288.6	322.1	362.3
69.0	388.7	381.1	358.9	323.8	281.4	245.2	231.0	245.2	281.4	323.8
72.0	353.0	345.5	323.0	286.8	242.3	203.0	187.1	203.0	242.3	286.8
75.0	319.3	311.8	289.0	251.6	205.2	162.4	144.2	162.4	205.2	251.6
78.0	286.9	279.5	256.6	218.8	170.3	124.6	103.9	124.6	170.3	218.8
81.0	256.7	249.1	226.1	187.8	138.3	90.32	66.65	90.32	138.3	187.8
84.0	228.2	220.7	197.8	159.4	110.0	61.09	34.64	61.09	110.0	159.4
87.0	201.6	194.2	171.5	133.7	85.67	38.14	11.13	38.14	85.67	133.7
90.0	176.8	169.7	147.5	111.2	65.34	22.47	1.503	22.47	65.34	111.2
93.0	154.1	147.2	126.1	91.23	48.91	13.21	1.666	13.21	48.91	91.23
96.0	133.7	127.1	105.7	71.63	35.46	8.249	1.879	8.249	35.46	71.63
99.0	115.4	108.0	88.27	58.47	27.05	6.043	2.132	6.043	27.05	58.47
102.0	99.02	91.16	72.73	47.51	21.13	4.996	2.399	4.996	21.13	47.51
105.0	84.63	77.83	60.66	38.96	16.78	4.498	2.685	4.498	16.78	38.96
108.0	72.06	65.85	50.73	32.09	13.72	4.270	2.978	4.270	13.72	32.09
111.0	61.20	54.37	42.74	26.59	11.58	4.216	3.283	4.216	11.58	26.59
114.0	51.87	45.82	36.18	22.27	10.00	4.264	3.591	4.264	10.00	22.27
117.0	43.93	38.85	30.59	18.85	8.867	4.393	3.910	4.393	8.867	18.85
120.0	37.28	33.40	26.03	16.02	8.050	4.572	4.218	4.572	8.050	16.02
123.0	31.23	28.77	22.28	13.80	7.509	4.776	4.530	4.776	7.509	13.80
126.0	25.86	24.72	19.15	12.17	7.154	4.992	4.824	4.992	7.154	12.17
129.0	21.65	21.35	16.52	10.95	6.929	5.241	5.143	5.241	6.929	10.95
132.0	19.10	18.54	14.40	9.997	6.817	5.513	5.451	5.513	6.817	9.997
135.0	17.15	16.25	12.78	9.301	6.798	5.806	5.772	5.806	6.798	9.301
138.0	15.21	14.35	11.53	8.771	6.835	6.109	6.097	6.109	6.835	8.771
141.0	13.58	12.84	10.53	8.398	6.919	6.422	6.408	6.422	6.919	8.398
144.0	12.17	11.50	9.765	8.166	7.029	6.733	6.708	6.733	7.029	8.166
147.0	11.01	10.45	9.166	7.999	7.150	7.025	6.994	7.025	7.150	7.999
150.0	10.13	9.631	8.801	7.929	7.323	7.309	7.285	7.309	7.323	7.929
153.0	9.530	9.117	8.540	7.906	7.528	7.579	7.555	7.579	7.528	7.906
156.0	9.044	8.751	8.374	7.924	7.767	7.842	7.813	7.842	7.767	7.924
159.0	8.671	8.514	8.277	8.023	8.001	8.085	8.044	8.085	8.001	8.023
162.0	8.446	8.367	8.270	8.171	8.190	8.281	8.242	8.281	8.190	8.171
165.0	8.402	8.351	8.358	8.318	8.360	8.446	8.389	8.446	8.360	8.318
168.0	8.552	8.459	8.466	8.443	8.492	8.559	8.502	8.559	8.492	8.443
171.0	8.665	8.581	8.607	8.582	8.637	8.717	8.641	8.717	8.637	8.582
174.0	8.760	8.702	8.750	8.738	8.827	8.944	8.810	8.944	8.827	8.738
177.0	8.833	8.794	8.836	8.830	8.916	9.023	8.884	9.023	8.916	8.830
180.0	9.004	8.934	8.931	8.916	8.984	9.061	8.950	9.061	8.984	8.916
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016
3.0	1013	1013	1014	1013	1013	1014	1014	1013	1014	1013
6.0	1008	1009	1009	1009	1008	1008	1008	1007	1008	1007
9.0	999.5	1000	1001	1000	999.5	999.0	998.2	997.3	997.6	997.3
12.0	987.5	988.8	989.3	988.8	987.5	986.2	984.6	983.4	983.3	983.4
15.0	972.0	973.7	974.8	973.7	972.0	969.9	967.5	965.4	965.2	965.4
18.0	953.5	956.1	957.6	956.1	953.5	950.1	946.7	943.7	943.1	943.7
21.0	931.9	935.6	937.4	935.6	931.9	927.3	922.1	918.5	917.4	918.5
24.0	907.7	912.4	914.3	912.4	907.7	901.3	894.6	889.7	888.1	889.7
27.0	880.5	886.5	888.7	886.5	880.5	872.7	863.8	857.6	855.4	857.6
30.0	850.8	858.1	860.9	858.1	850.8	841.2	830.3	822.4	819.5	822.4

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QC
 Test Date: 2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks:

Photometric Data Table [cd]

33.0	818.9	827.4	830.9	827.4	818.9	807.0	794.3	784.5	781.2	784.5
36.0	784.9	795.2	798.8	795.2	784.9	770.9	755.7	744.3	740.3	744.3
39.0	749.5	760.9	765.2	760.9	749.5	733.0	715.3	701.7	697.1	701.7
42.0	712.5	725.4	730.3	725.4	712.5	693.6	673.3	657.8	652.7	657.8
45.0	674.1	688.2	693.4	688.2	674.1	653.2	630.2	612.5	606.4	612.5
48.0	634.8	650.3	655.8	650.3	634.8	611.8	586.2	566.4	559.5	566.4
51.0	594.8	611.9	618.0	611.9	594.8	569.6	541.7	519.6	512.1	519.6
54.0	554.9	572.7	578.9	572.7	554.9	527.6	496.9	472.8	464.3	472.8
57.0	514.6	533.5	540.1	533.5	514.6	485.5	452.3	426.0	416.0	426.0
60.0	474.8	494.8	501.5	494.8	474.8	444.0	407.5	378.9	368.3	378.9
63.0	435.1	456.1	463.5	456.1	435.1	402.6	364.1	333.4	321.9	333.4
66.0	396.2	418.1	425.9	418.1	396.2	362.3	322.1	288.6	276.1	288.6
69.0	358.9	381.1	388.7	381.1	358.9	323.8	281.4	245.2	231.0	245.2
72.0	323.0	345.5	353.0	345.5	323.0	286.8	242.3	203.0	187.1	203.0
75.0	289.0	311.8	319.3	311.8	289.0	251.6	205.2	162.4	144.2	162.4
78.0	256.6	279.5	286.9	279.5	256.6	218.8	170.3	124.6	103.9	124.6
81.0	226.1	249.1	256.7	249.1	226.1	187.8	138.3	90.32	66.65	90.32
84.0	197.8	220.7	228.2	220.7	197.8	159.4	110.0	61.09	34.64	61.09
87.0	171.5	194.2	201.6	194.2	171.5	133.7	85.67	38.14	11.13	38.14
90.0	147.5	169.7	176.8	169.7	147.5	111.2	65.34	22.47	1.503	22.47
93.0	126.1	147.2	154.1	147.2	126.1	91.23	48.91	13.21	1.666	13.21
96.0	105.7	127.1	133.7	127.1	105.7	71.63	35.46	8.249	1.879	8.249
99.0	88.27	108.0	115.4	108.0	88.27	58.47	27.05	6.043	2.132	6.043
102.0	72.73	91.16	99.02	91.16	72.73	47.51	21.13	4.996	2.399	4.996
105.0	60.66	77.83	84.63	77.83	60.66	38.96	16.78	4.498	2.685	4.498
108.0	50.73	65.85	72.06	65.85	50.73	32.09	13.72	4.270	2.978	4.270
111.0	42.74	54.37	61.20	54.37	42.74	26.59	11.58	4.216	3.283	4.216
114.0	36.18	45.82	51.87	45.82	36.18	22.27	10.00	4.264	3.591	4.264
117.0	30.59	38.85	43.93	38.85	30.59	18.85	8.867	4.393	3.910	4.393
120.0	26.03	33.40	37.28	33.40	26.03	16.02	8.050	4.572	4.218	4.572
123.0	22.28	28.77	31.23	28.77	22.28	13.80	7.509	4.776	4.530	4.776
126.0	19.15	24.72	25.86	24.72	19.15	12.17	7.154	4.992	4.824	4.992
129.0	16.52	21.35	21.65	21.35	16.52	10.95	6.929	5.241	5.143	5.241
132.0	14.40	18.54	19.10	18.54	14.40	9.997	6.817	5.513	5.451	5.513
135.0	12.78	16.25	17.15	16.25	12.78	9.301	6.798	5.806	5.772	5.806
138.0	11.53	14.35	15.21	14.35	11.53	8.771	6.835	6.109	6.097	6.109
141.0	10.53	12.84	13.58	12.84	10.53	8.398	6.919	6.422	6.408	6.422
144.0	9.765	11.50	12.17	11.50	9.765	8.166	7.029	6.733	6.708	6.733
147.0	9.166	10.45	11.01	10.45	9.166	7.999	7.150	7.025	6.994	7.025
150.0	8.801	9.631	10.13	9.631	8.801	7.929	7.323	7.309	7.285	7.309
153.0	8.540	9.117	9.530	9.117	8.540	7.906	7.528	7.579	7.555	7.579
156.0	8.374	8.751	9.044	8.751	8.374	7.924	7.767	7.842	7.813	7.842
159.0	8.277	8.514	8.671	8.514	8.277	8.023	8.001	8.085	8.044	8.085
162.0	8.270	8.367	8.446	8.367	8.270	8.171	8.190	8.281	8.242	8.281
165.0	8.358	8.351	8.402	8.351	8.358	8.318	8.360	8.446	8.389	8.446
168.0	8.466	8.459	8.552	8.459	8.466	8.443	8.492	8.559	8.502	8.559
171.0	8.607	8.581	8.665	8.581	8.607	8.582	8.637	8.717	8.641	8.717
174.0	8.750	8.702	8.760	8.702	8.750	8.738	8.827	8.944	8.810	8.944
177.0	8.836	8.794	8.833	8.794	8.836	8.830	8.916	9.023	8.884	9.023
180.0	8.931	8.934	9.004	8.934	8.931	8.916	8.984	9.061	8.950	9.061
G/C	300.0	315.0	330.0	345.0						
0.0	1016	1016	1016	1016						
3.0	1014	1014	1013	1013						
6.0	1008	1008	1008	1009						
9.0	998.2	999.0	999.5	1000						
12.0	984.6	986.2	987.5	988.8						
15.0	967.5	969.9	972.0	973.7						
18.0	946.7	950.1	953.5	956.1						
21.0	922.1	927.3	931.9	935.6						
24.0	894.6	901.3	907.7	912.4						
27.0	863.8	872.7	880.5	886.5						
30.0	830.3	841.2	850.8	858.1						
33.0	794.3	807.0	818.9	827.4						
36.0	755.7	770.9	784.9	795.2						
39.0	715.3	733.0	749.5	760.9						
42.0	673.3	693.6	712.5	725.4						
45.0	630.2	653.2	674.1	688.2						
48.0	586.2	611.8	634.8	650.3						
51.0	541.7	569.6	594.8	611.9						
54.0	496.9	527.6	554.9	572.7						
57.0	452.3	485.5	514.6	533.5						
60.0	407.5	444.0	474.8	494.8						
63.0	364.1	402.6	435.1	456.1						
66.0	322.1	362.3	396.2	418.1						

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QC
 Test Date: 2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks:

Photometric Data Table [cd]

69.0	281.4	323.8	358.9	381.1
72.0	242.3	286.8	323.0	345.5
75.0	205.2	251.6	289.0	311.8
78.0	170.3	218.8	256.6	279.5
81.0	138.3	187.8	226.1	249.1
84.0	110.0	159.4	197.8	220.7
87.0	85.67	133.7	171.5	194.2
90.0	65.34	111.2	147.5	169.7
93.0	48.91	91.23	126.1	147.2
96.0	35.46	71.63	105.7	127.1
99.0	27.05	58.47	88.27	108.0
102.0	21.13	47.51	72.73	91.16
105.0	16.78	38.96	60.66	77.83
108.0	13.72	32.09	50.73	65.85
111.0	11.58	26.59	42.74	54.37
114.0	10.00	22.27	36.18	45.82
117.0	8.867	18.85	30.59	38.85
120.0	8.050	16.02	26.03	33.40
123.0	7.509	13.80	22.28	28.77
126.0	7.154	12.17	19.15	24.72
129.0	6.929	10.95	16.52	21.35
132.0	6.817	9.997	14.40	18.54
135.0	6.798	9.301	12.78	16.25
138.0	6.835	8.771	11.53	14.35
141.0	6.919	8.398	10.53	12.84
144.0	7.029	8.166	9.765	11.50
147.0	7.150	7.999	9.166	10.45
150.0	7.323	7.929	8.801	9.631
153.0	7.528	7.906	8.540	9.117
156.0	7.767	7.924	8.374	8.751
159.0	8.001	8.023	8.277	8.514
162.0	8.190	8.171	8.270	8.367
165.0	8.360	8.318	8.358	8.351
168.0	8.492	8.443	8.466	8.459
171.0	8.637	8.582	8.607	8.581
174.0	8.827	8.738	8.750	8.702
177.0	8.916	8.830	8.836	8.794
180.0	8.984	8.916	8.931	8.934

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QC
 Test Date: 2019-12-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks: