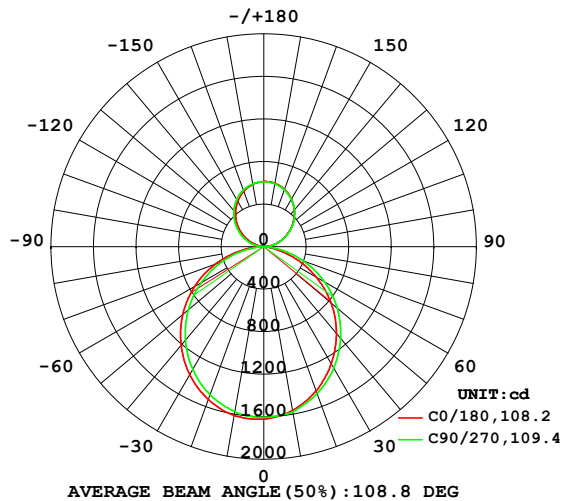


LUMINAIRE PHOTOMETRIC TEST REPORT

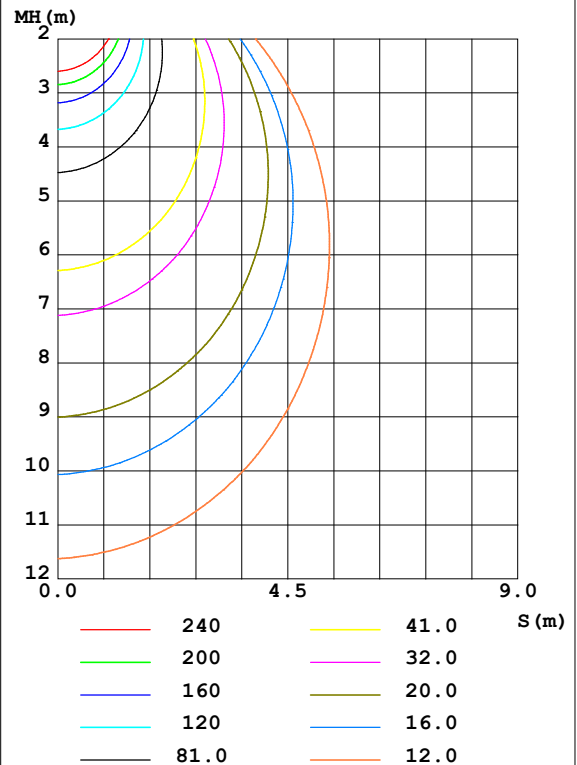
Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 116.53 lm/W			
MODEL		Imax(cd)	1625	S/MH(C0/180)	1.17
NOMINAL POWER(W)	50W	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	120.0	TOTAL FLUX(lm)	6105.9	η UP,DN(C0-180)	14.1,35.8
NOMINAL FLUX(lm)	6105.94	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	14.0,36.1
LAMPS INSIDE	1	η up(%)	28.2	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120.0	η down(%)	71.8	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

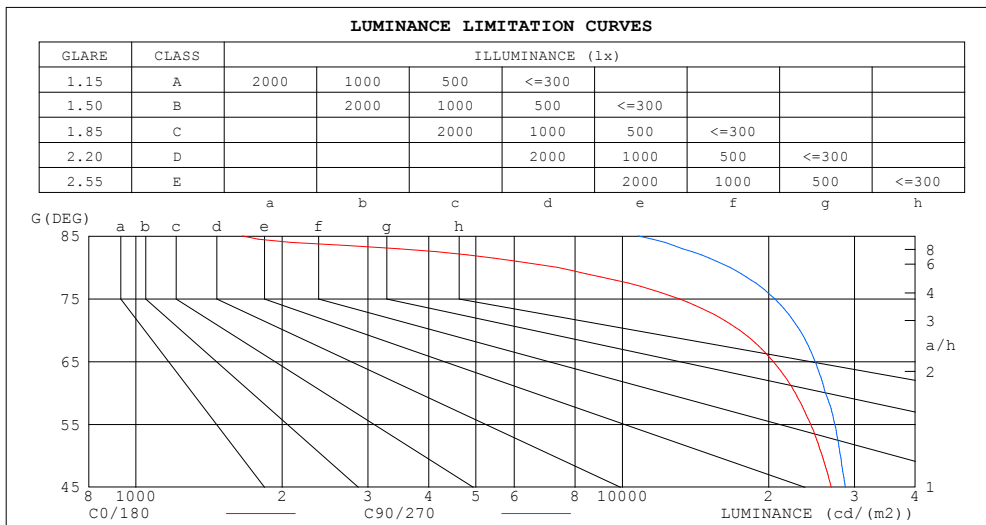
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1562	1564	1577	1584	1611	1599	1575	1547	0- 10	152.1	152.1	2.49,2.49
20	1442	1448	1469	1498	1529	1516	1481	1435	10- 20	432.7	584.7	9.58,9.58
30	1270	1286	1318	1361	1392	1377	1335	1273	20- 30	648.3	1233	20.2,20.2
40	1063	1086	1125	1180	1210	1194	1146	1074	30- 40	772.2	2005	32.8,32.8
50	827.6	858.5	902.5	967.3	995.8	978.5	926.4	847.9	40- 50	792.1	2797	45.8,45.8
60	567.0	609.4	653.8	731.1	751.2	738.0	681.9	592.9	50- 60	708.1	3505	57.4,57.4
70	298.0	344.4	396.2	471.6	487.7	469.8	420.0	326.2	60- 70	529.1	4034	66.1,66.1
80	63.85	94.84	144.5	208.8	218.8	202.6	160.2	82.74	70- 80	286.1	4321	70.8,70.8
90	7.140	6.276	2.081	15.93	17.03	13.49	1.876	7.352	80- 90	66.25	4387	71.8,71.8
100	74.26	79.27	86.40	56.71	31.16	57.93	78.54	83.85	90-100	33.24	4420	72.4,72.4
110	172.9	175.7	180.2	152.4	130.1	152.8	169.8	178.0	100-110	122.3	4542	74.4,74.4
120	270.6	273.2	275.9	250.1	231.1	249.7	261.7	273.3	110-120	210.4	4753	77.8,77.8
130	363.9	365.2	369.1	344.1	327.2	344.6	353.1	366.6	120-130	275.6	5028	82.4,82.4
140	448.6	447.4	451.0	428.7	416.6	431.1	438.7	450.3	130-140	307.0	5335	87.4,87.4
150	519.9	517.1	518.5	501.8	493.8	505.0	510.8	520.6	140-150	298.2	5634	92.3,92.3
160	574.2	570.1	569.5	559.1	555.2	561.7	566.0	572.7	150-160	249.2	5883	96.3,96.3
170	606.1	603.0	601.6	597.1	596.3	598.2	599.6	604.1	160-170	165.3	6048	99.1,99.1
180	612.0	612.0	612.0	612.0	612.0	612.0	612.0	612.0	170-180	57.91	6106	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1658	10772
80	7354	16643
75	13091	20572
70	17428	23169
65	20439	24917
60	22678	26154
55	24391	27344
50	25751	28080
45	26875	28735

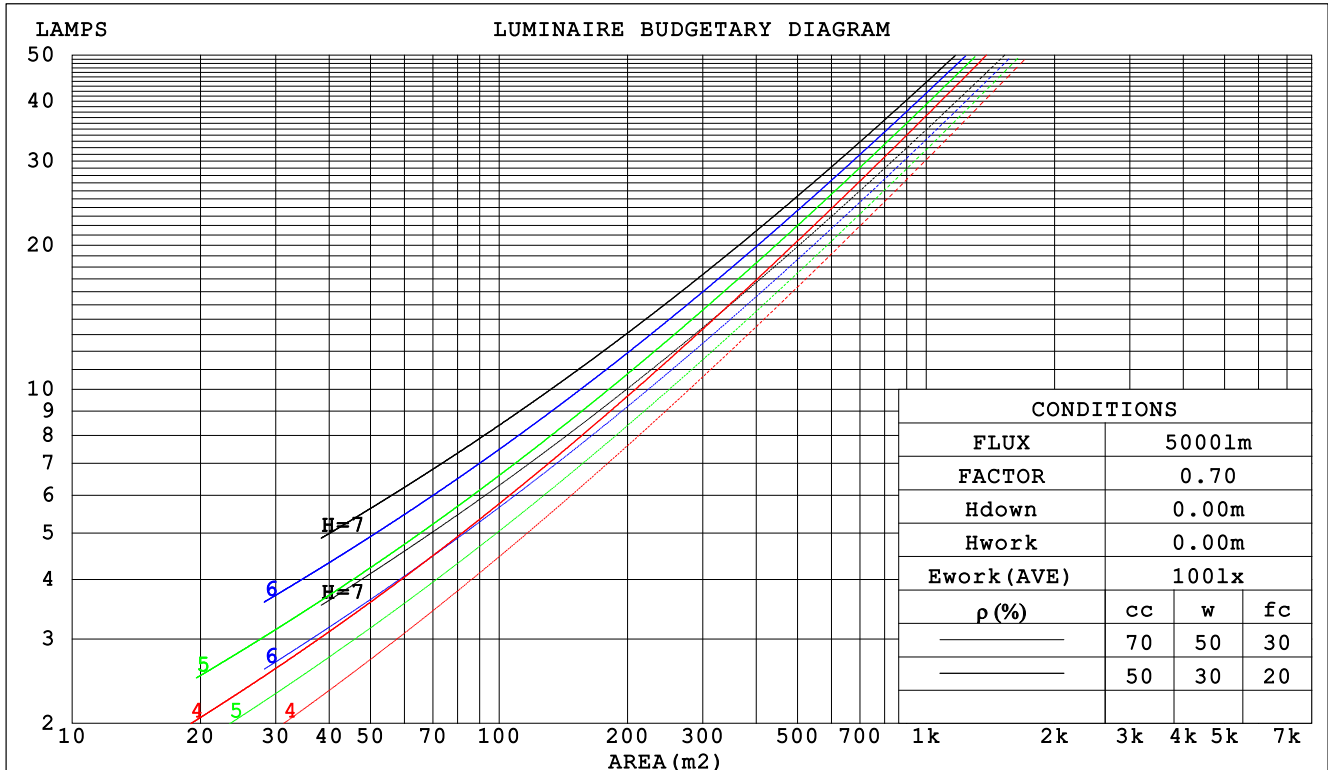
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
0.0	1.12	1.12	1.12	1.06	1.06	1.06	.95	.95	.95	.85	.85	.85	.76	.76	.76	.72
1.0	.98	.94	.91	.93	.90	.86	.84	.81	.79	.75	.73	.71	.67	.66	.64	.60
2.0	.86	.79	.74	.81	.76	.71	.73	.69	.65	.66	.62	.59	.59	.56	.54	.50
3.0	.75	.68	.61	.72	.65	.59	.65	.59	.54	.58	.54	.50	.52	.49	.46	.43
4.0	.67	.58	.52	.63	.56	.50	.57	.51	.46	.52	.47	.43	.47	.43	.39	.36
5.0	.59	.51	.45	.57	.49	.43	.51	.45	.40	.47	.41	.37	.42	.38	.34	.32
6.0	.53	.45	.39	.51	.43	.37	.46	.40	.35	.42	.37	.33	.38	.34	.30	.28
7.0	.48	.40	.34	.46	.38	.33	.42	.36	.31	.38	.33	.29	.35	.30	.27	.24
8.0	.44	.36	.30	.42	.35	.29	.38	.32	.27	.35	.30	.26	.32	.27	.24	.22
9.0	.40	.32	.27	.38	.31	.26	.35	.29	.25	.32	.27	.23	.29	.25	.22	.20
10.0	.37	.29	.24	.35	.28	.24	.33	.27	.22	.30	.25	.21	.27	.23	.20	.18



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	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 Coefficients (WEC)										
0.0																	
1.0	.290	.165	.052	.274	.156	.050	.245	.141	.045	.218	.126	.040	.194	.112	.036		
2.0	.272	.149	.046	.258	.142	.044	.232	.129	.040	.208	.117	.036	.185	.105	.033		
3.0	.253	.134	.040	.240	.128	.039	.216	.117	.036	.194	.106	.033	.173	.096	.030		
4.0	.234	.122	.036	.222	.116	.034	.200	.106	.032	.180	.097	.029	.161	.088	.027		
5.0	.217	.110	.032	.206	.106	.031	.186	.097	.029	.168	.088	.026	.150	.080	.024		
6.0	.201	.101	.029	.192	.097	.028	.173	.089	.026	.156	.081	.024	.140	.074	.022		
7.0	.188	.093	.026	.179	.089	.025	.162	.082	.024	.146	.075	.022	.131	.068	.020		
8.0	.176	.086	.024	.167	.082	.023	.152	.076	.022	.137	.070	.020	.123	.063	.018		
9.0	.165	.080	.022	.157	.077	.022	.143	.071	.020	.129	.065	.019	.116	.059	.017		
10.0	.155	.074	.021	.148	.072	.020	.135	.066	.019	.122	.061	.017	.110	.055	.016		

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	.405	.405	.405	.346	.346	.346	.236	.236	.236	.136	.136	.136	.043	.043	.043	
1.0	.395	.373	.352	.338	.320	.303	.231	.220	.210	.133	.127	.122	.043	.041	.039	
2.0	.387	.350	.318	.332	.301	.275	.227	.208	.192	.131	.121	.112	.042	.039	.037	
3.0	.380	.333	.296	.326	.287	.256	.224	.200	.180	.129	.117	.106	.042	.038	.035	
4.0	.373	.321	.280	.320	.277	.244	.220	.193	.172	.127	.113	.102	.041	.037	.033	
5.0	.366	.311	.270	.314	.269	.235	.217	.188	.166	.125	.110	.098	.040	.036	.032	
6.0	.359	.303	.262	.309	.262	.228	.213	.184	.162	.124	.108	.096	.040	.035	.032	
7.0	.353	.296	.257	.304	.257	.224	.210	.180	.158	.122	.106	.094	.039	.035	.031	
8.0	.347	.291	.252	.299	.252	.220	.207	.177	.156	.120	.105	.093	.039	.034	.031	
9.0	.341	.286	.249	.294	.248	.217	.204	.175	.154	.119	.103	.092	.038	.034	.030	
10.0	.336	.282	.246	.290	.245	.215	.201	.172	.153	.117	.102	.091	.038	.033	.030	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm										
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH					TYPE:30K 3.7			WEIGHT:		
SPEC.:					DIM.: 4FT			SERIAL No.:		
MFR.: WS					SUR.:1.13*0.05			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	22.0	23.1	22.6	23.7	24.5	22.5	23.6	23.1	24.2	24.9
3H	23.0	24.1	23.7	24.7	25.5	23.8	24.8	24.5	25.5	26.3
4H	23.3	24.3	24.0	25.0	25.7	24.3	25.3	25.0	25.9	26.7
6H	23.3	24.3	24.0	24.9	25.8	24.6	25.5	25.3	26.2	27.0
8H	23.3	24.2	24.0	24.9	25.7	24.6	25.5	25.3	26.2	27.0
12H	23.2	24.1	23.9	24.8	25.6	24.6	25.4	25.3	26.1	27.0
4H 2H	22.5	23.4	23.1	24.1	24.9	22.8	23.8	23.5	24.5	25.3
3H	23.7	24.5	24.4	25.2	26.1	24.3	25.2	25.0	25.9	26.7
4H	24.0	24.8	24.8	25.5	26.4	24.9	25.6	25.6	26.4	27.3
6H	24.1	24.8	24.9	25.5	26.4	25.2	25.9	26.0	26.7	27.6
8H	24.1	24.7	24.8	25.4	26.4	25.3	25.9	26.1	26.7	27.6
12H	24.0	24.6	24.8	25.3	26.3	25.3	25.9	26.1	26.7	27.6
8H 4H	24.1	24.7	24.9	25.5	26.4	24.9	25.5	25.7	26.3	27.2
6H	24.3	24.8	25.1	25.6	26.5	25.4	25.8	26.2	26.6	27.6
8H	24.2	24.7	25.1	25.5	26.5	25.5	25.9	26.3	26.7	27.7
12H	24.2	24.6	25.0	25.4	26.4	25.5	25.9	26.3	26.7	27.7
12H 4H	24.1	24.6	24.9	25.4	26.4	24.9	25.4	25.7	26.2	27.2
6H	24.2	24.7	25.1	25.5	26.5	25.3	25.7	26.1	26.6	27.5
8H	24.2	24.6	25.1	25.4	26.4	25.4	25.8	26.3	26.6	27.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 6106 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.3)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

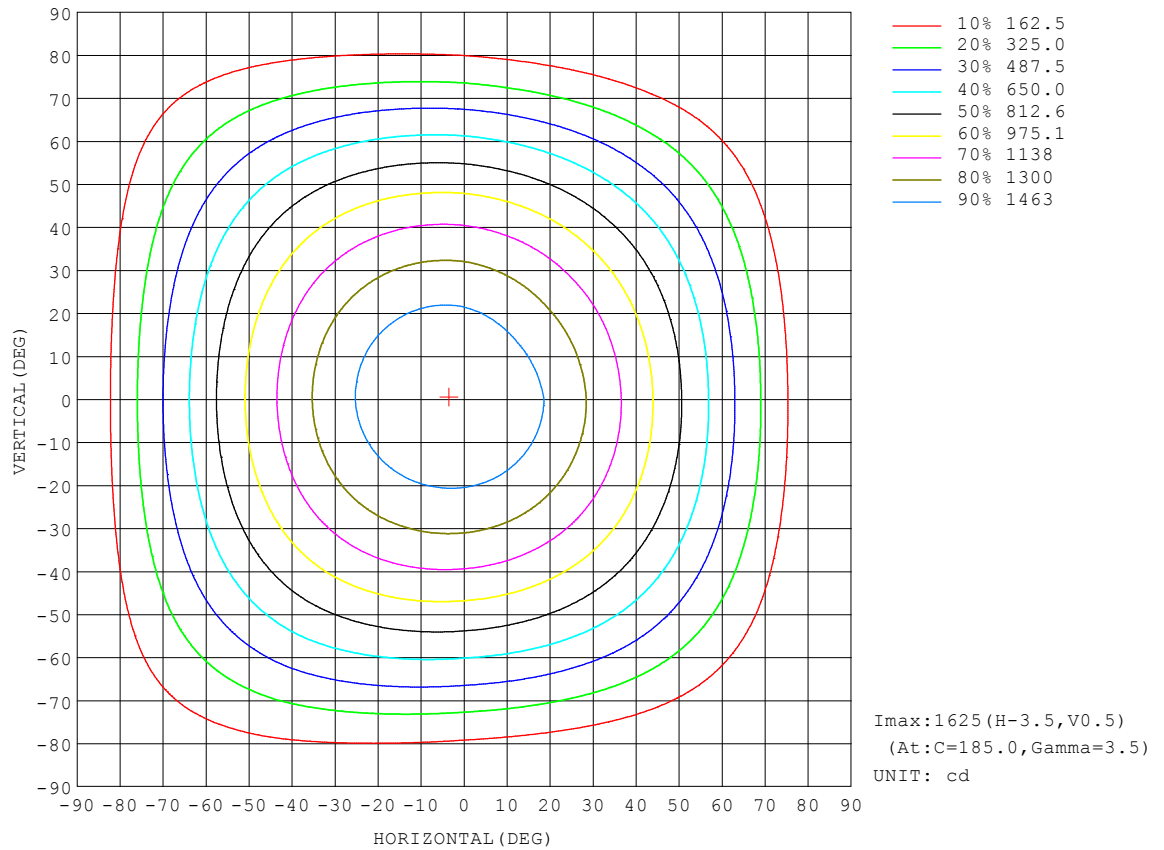
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	50	39	32	49	38	32	46	36	31	24
0.80	60	48	41	58	47	40	54	45	39	30
1.00	68	57	50	65	55	48	60	54	46	36
1.25	75	64	57	72	62	56	66	58	53	42
1.50	80	70	63	77	67	61	70	63	57	45
2.00	87	78	72	83	75	69	76	69	65	51
2.50	91	83	77	87	80	74	79	73	69	54
3.00	95	87	82	90	84	79	81	77	73	57
4.00	99	93	88	94	89	84	85	81	78	60
5.00	101	96	92	96	92	88	87	84	81	62
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

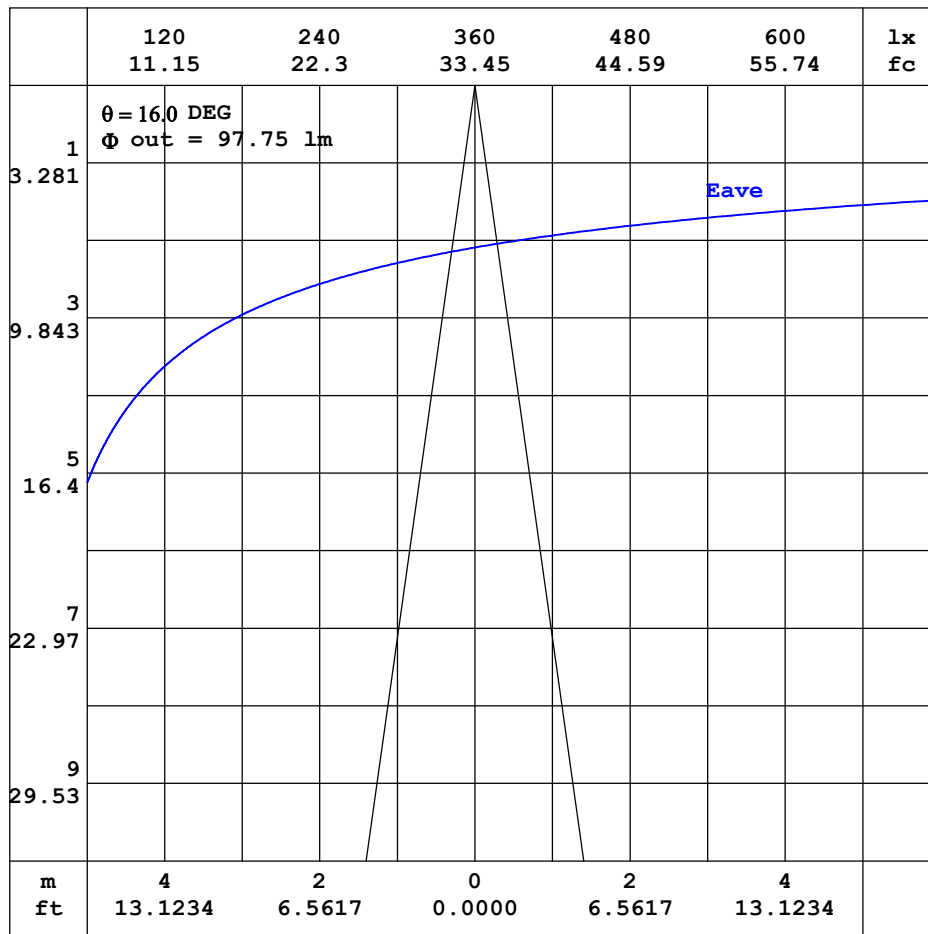


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

AAI CURVES

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:



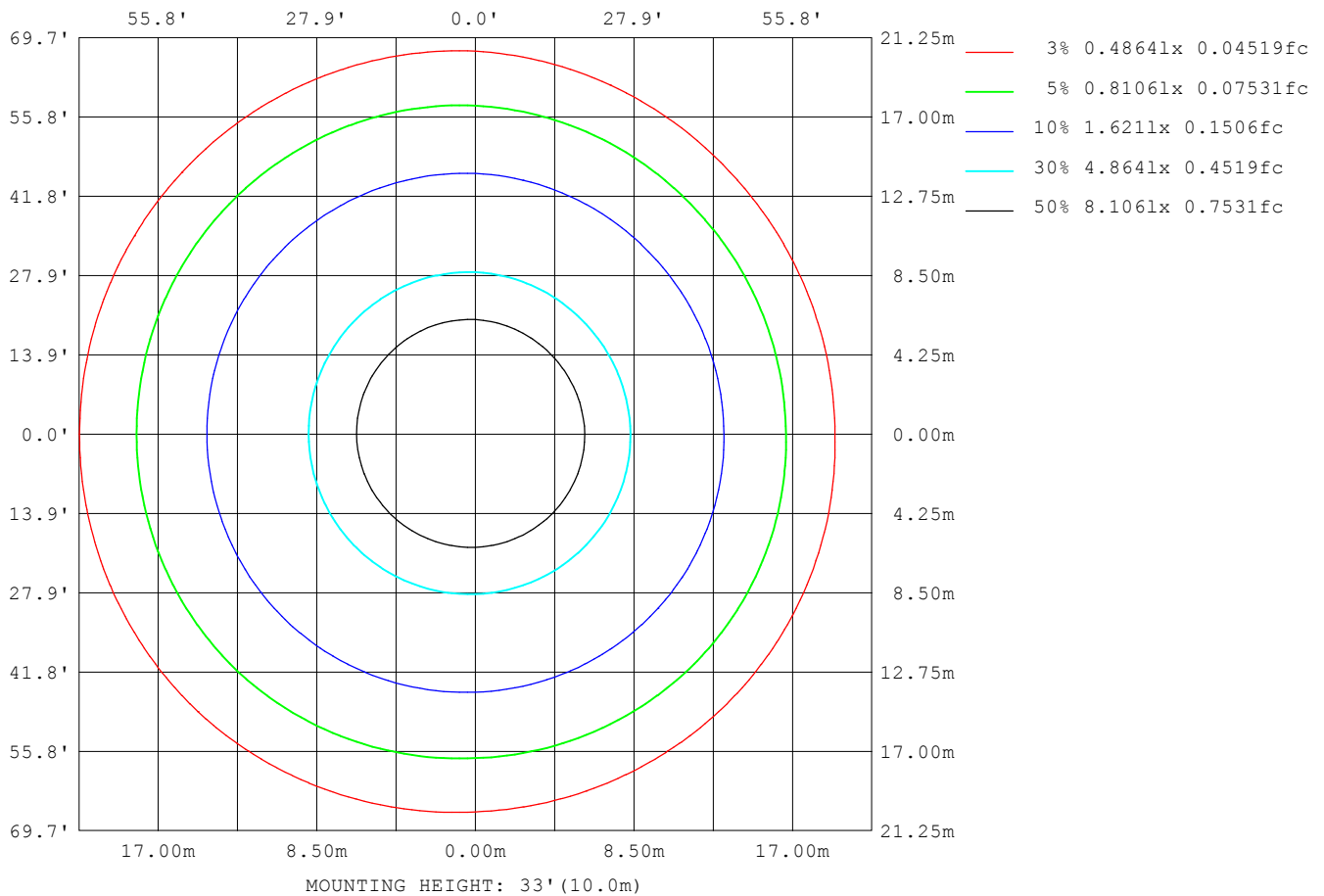
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

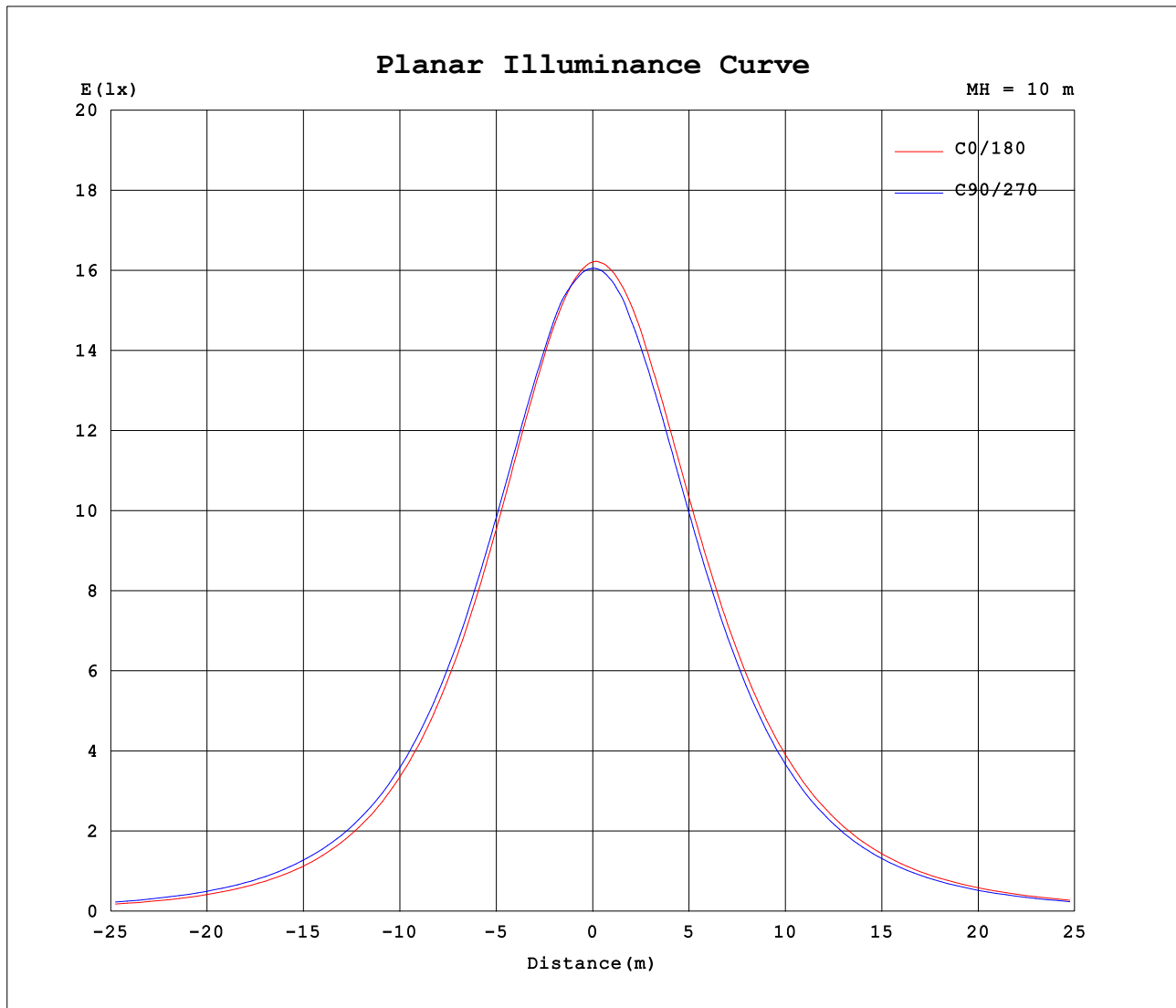
AvgL	cd/m2
L_0~180 (65) av	24927
L_0~180 (75) av	20149
L_0~180 (85) av	12044
L_90~270 (65) av	25534
L_90~270 (75) av	21376
L_90~270 (85) av	11472
L_45 (65) av	25395
L_45 (75) av	20919
L_45 (85) av	12011

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity: 65.0%
Test Distance: 10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1621	1620	1620	1619	1618	1617	1616	1616	1615	1614	1613	1612	1611	1610	1610	1609	1608	1607	1606
5	1600	1600	1599	1599	1599	1598	1598	1598	1597	1597	1597	1596	1596	1596	1595	1595	1595	1595	1595
10	1562	1562	1562	1561	1561	1562	1562	1562	1563	1564	1565	1566	1568	1569	1571	1572	1574	1575	1577
15	1509	1510	1510	1511	1512	1513	1514	1515	1516	1517	1518	1519	1519	1520	1521	1522	1524	1525	1527
20	1442	1442	1442	1442	1443	1443	1444	1445	1446	1448	1450	1451	1454	1456	1458	1461	1463	1466	1469
25	1361	1362	1362	1363	1364	1365	1367	1368	1370	1372	1374	1377	1379	1382	1385	1388	1392	1395	1399
30	1270	1271	1272	1273	1275	1277	1278	1281	1283	1286	1288	1292	1295	1298	1302	1306	1310	1314	1318
35	1170	1172	1173	1175	1177	1179	1181	1184	1187	1189	1193	1196	1199	1203	1207	1211	1215	1220	1224
40	1063	1064	1066	1069	1071	1073	1076	1079	1082	1086	1089	1093	1097	1101	1105	1110	1115	1120	1125
45	950	952	954	956	959	962	965	968	971	975	978	982	986	991	995	1000	1005	1010	1016
50	828	830	833	836	840	843	847	850	854	858	863	867	871	876	881	886	891	897	902
55	700	703	707	711	715	720	724	728	733	738	742	747	751	756	762	767	772	778	784
60	567	572	576	581	586	590	595	600	605	609	614	618	622	627	632	637	642	648	654
65	432	437	442	447	453	458	463	468	473	479	483	488	493	498	503	509	514	520	527
70	298	303	308	313	318	323	328	334	339	344	350	355	360	366	371	377	383	390	396
75	169	174	179	184	189	194	199	204	209	215	220	225	230	236	242	247	253	260	266
80	63.9	66.4	69.1	72.1	75.3	78.8	82.4	86.3	90.5	94.8	99.5	104	110	115	120	126	132	138	145
85	7.22	7.66	8.30	9.16	10.2	11.5	13.0	14.6	16.5	18.6	21.0	23.5	26.2	29.2	32.3	35.7	39.2	43.0	46.9
90	7.14	7.21	7.24	7.22	7.17	7.07	6.93	6.76	6.54	6.28	5.58	4.88	4.19	3.55	2.99	2.53	2.21	2.05	2.08
95	29.6	29.5	29.5	29.5	29.7	30.0	30.3	30.7	31.3	31.9	33.4	34.9	36.4	37.8	39.0	40.1	40.9	41.3	41.4
100	74.3	74.7	75.2	75.7	76.2	76.8	77.4	78.0	78.6	79.3	80.7	82.0	83.3	84.5	85.5	86.2	86.6	86.7	86.4
105	124	124	124	125	125	125	126	126	127	127	128	129	130	131	132	133	133	133	132
110	173	173	173	174	174	174	175	175	175	176	177	178	179	179	180	181	181	181	180
115	222	223	223	223	224	224	224	224	225	225	226	226	227	228	228	228	228	228	227
120	271	271	271	271	272	272	272	273	273	273	274	275	275	276	276	277	277	276	276
125	318	318	318	319	319	319	319	320	320	320	321	322	323	323	324	324	324	324	324
130	364	364	364	364	364	364	364	365	365	365	366	367	368	369	369	369	370	370	369
135	407	407	407	407	407	407	407	407	408	408	409	409	410	411	412	412	412	412	412
140	449	448	448	448	447	447	447	447	447	447	448	449	450	450	451	451	451	451	451
145	486	485	485	485	484	484	484	484	484	484	485	485	486	486	487	487	487	487	487
150	520	519	519	519	518	518	518	517	517	517	517	518	518	519	519	519	519	519	518
155	550	549	548	548	547	547	547	546	546	546	546	546	546	547	547	547	547	546	546
160	574	574	573	572	572	571	571	571	570	570	570	570	570	570	570	570	570	570	569
165	592	592	592	591	591	590	590	590	590	589	589	589	589	589	589	589	589	588	588
170	606	606	605	605	605	604	604	604	603	603	603	603	603	602	602	602	602	602	602
175	613	613	613	612	612	612	612	611	611	611	611	611	610	610	610	610	610	610	610
180	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	1604	1603	1601	1600	1599	1598	1597	1597	1597	1599	1601	1604	1607	1610	1613	1616	1619	1621	1621
5	1595	1595	1595	1595	1595	1595	1596	1597	1598	1601	1604	1607	1610	1613	1616	1619	1622	1624	1624
10	1577	1578	1579	1579	1580	1581	1582	1583	1584	1587	1591	1594	1597	1600	1603	1606	1609	1611	1611
15	1529	1531	1534	1536	1539	1542	1545	1548	1551	1555	1559	1562	1566	1569	1572	1574	1577	1578	1578
20	1472	1475	1478	1481	1484	1488	1491	1494	1498	1502	1506	1510	1514	1518	1521	1524	1527	1529	1529
25	1403	1407	1411	1415	1419	1423	1427	1431	1435	1440	1444	1448	1452	1456	1459	1462	1465	1467	1467
30	1323	1328	1332	1337	1342	1347	1352	1356	1361	1365	1370	1374	1378	1382	1385	1388	1390	1392	1392
35	1230	1235	1241	1247	1253	1258	1264	1269	1275	1280	1284	1289	1293	1296	1299	1302	1304	1306	1306
40	1131	1137	1143	1150	1156	1162	1168	1174	1180	1185	1190	1194	1198	1201	1204	1207	1209	1210	1210
45	1023	1030	1037	1044	1051	1058	1064	1071	1077	1082	1087	1091	1095	1098	1101	1103	1105	1106	1107
50	910	917	925	932	940	947	954	961	967	972	977	981	985	988	991	993	995	996	996
55	792	800	808	816	823	831	838	845	852	857	861	865	868	871	873	875	876	877	877
60	662	671	680	689	698	707	716	724	731	736	740	743	746	748	749	750	751	751	752
65	535	544	553	562	571	580	588	596	604	608	612	615	617	619	621	621	622	622	621
70	405	414	423	432	440	449	457	465	472	476	479	482	485	486	487	488	488	488	487
75	275	283	292	301	309	317	325	332	339	343	346	348	350	352	352	353	353	352	352
80	152	160	168	175	183	190	197	203	209	212	215	217	218	219	220	220	219	219	218
85	52.1	57.3	62.7	67.9	73.1	78.1	82.9	87.4	91.4	93.6	95.4	96.8	97.8	98.4	98.6	98.6	98.3	97.7	97.4
90	3.29	4.68	6.21	7.84	9.52	11.2	12.9	14.5	15.9	16.5	17.0	17.3	17.5	17.6	17.6	17.5	17.3	17.0	16.9
95	39.2	36.6	33.8	30.7	27.5	24.2	20.9	17.7	14.6	12.9	11.3	10.0	8.95	8.10	7.47	7.05	6.86	6.87	7.18
100	84.2	81.5	78.6	75.3	71.8	68.2	64.4	60.6	56.7	52.8	49.0	45.4	42.0	38.9	36.2	34.0	32.3	31.2	32.6
105	130	128	125	122	118	115	111	108	104	100	96.6	93.2	89.9	87.0	84.4	82.2	80.6	79.4	80.9
110	178	175	173	170	166	163	159	156	152	149	146	142	139	137	134	133	131	130	131
115	225	223	220	217	214	211	208	205	202	198	196	193	190	188	186	184	183	182	183
120	274	271	269	266	263	260	256	253	250	247	244	241	239	237	235	233	232	231	232
125	321	319	316	314	311	308	304	301	298	295	292	290	287	285	283	282	281	280	281
130	367	365	362	359	356	353	350	347	344	341	339	336	334	332	330	329	328	327	328
135	410	408	405	402	399	396	394	391	388	385	383	381	379	377	376	375	374	373	374
140	449	447	445	442	439	437	434	431	429	427	425	423	421	420	418	418	417	417	418
145	485	483	481	479	477	474	472	469	467	465	464	462	461	459	458	458	457	457	458
150	517	515	514	512	510	508	506	504	502	500	499	498	497	496	495	494	494	494	495
155	545	544	542	541	539	537	536	534	533	531	530	530	529	528	527	527	527	527	527
160	569	567	566	565	564	563	561	560	559	558	558	557	556	556	556	555	555	555	556
165	587	587	586	585	584	583	582	582	581	580	580	579	579	579	579	578	578	578	579
170	601	601	600	600	599	599	598	598	597	597	597	597	596	596	596	596	596	596	596
175	609	609	609	609	608	608	608	608	608	608	608	608	608	608	608	608	608	608	608
180	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm		
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH	TYPE:30K 3.7	WEIGHT:
SPEC.:	DIM.: 4FT	SERIAL No.:
MFR.: WS	SUR.:1.13*0.05	Shielding Angle:

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	1621	1621	1620	1619	1618	1617	1615	1614	1613	1612	1611	1610	1610	1609	1608	1607	1606	1604	1603
5	1624	1624	1623	1622	1621	1619	1618	1616	1614	1613	1611	1609	1607	1605	1603	1601	1599	1596	1594
10	1611	1610	1609	1607	1605	1603	1601	1599	1596	1594	1592	1589	1587	1584	1581	1578	1575	1572	1568
15	1578	1577	1576	1574	1572	1570	1567	1565	1562	1559	1556	1552	1549	1545	1541	1538	1534	1529	1524
20	1529	1528	1527	1526	1524	1522	1519	1516	1513	1510	1506	1502	1498	1494	1490	1485	1481	1475	1469
25	1467	1466	1465	1463	1461	1459	1456	1453	1449	1446	1442	1438	1434	1429	1424	1419	1414	1407	1401
30	1392	1391	1390	1388	1386	1383	1380	1377	1373	1370	1366	1361	1356	1351	1346	1341	1335	1327	1320
35	1306	1305	1304	1302	1300	1297	1294	1290	1287	1283	1278	1274	1269	1263	1257	1252	1245	1237	1229
40	1210	1209	1208	1206	1204	1201	1198	1194	1190	1186	1181	1176	1171	1165	1159	1153	1146	1138	1129
45	1106	1105	1104	1102	1099	1096	1093	1089	1085	1081	1076	1071	1065	1060	1053	1047	1040	1031	1022
50	996	995	993	991	989	986	982	978	974	970	965	959	953	947	941	934	926	917	908
55	877	876	875	873	871	868	865	861	857	852	847	841	835	828	821	814	806	797	788
60	752	751	750	749	747	744	741	738	734	729	724	718	711	705	698	690	682	672	662
65	621	620	618	616	614	611	608	604	600	596	591	586	580	574	567	560	553	542	532
70	487	485	484	482	479	477	473	470	466	462	457	452	447	441	434	428	420	410	399
75	351	349	348	346	343	341	338	334	331	327	322	318	313	307	301	294	287	277	267
80	217	216	215	213	211	209	206	203	199	196	192	188	183	178	172	166	160	152	143
85	96.8	95.9	94.9	93.6	92.0	90.2	88.2	85.9	83.0	79.9	76.5	73.0	69.3	65.4	61.4	57.3	53.0	48.2	43.4
90	16.8	16.5	16.2	15.9	15.4	14.9	14.2	13.5	12.1	10.7	9.27	7.83	6.42	5.09	3.87	2.78	1.88	2.06	2.42
95	7.68	8.38	9.26	10.3	11.5	12.9	14.4	16.0	18.2	20.5	22.8	25.1	27.4	29.6	31.7	33.7	35.4	36.2	36.8
100	34.6	37.2	40.1	43.3	46.8	50.5	54.2	57.9	60.7	63.4	65.9	68.4	70.7	72.9	75.0	76.8	78.5	79.9	81.0
105	82.8	85.2	88.1	91.2	94.5	98.0	102	105	108	110	112	114	117	118	120	122	123	125	126
110	133	135	138	140	143	146	150	153	155	157	159	161	163	165	167	168	170	171	173
115	184	186	188	191	193	196	199	201	203	205	207	208	210	211	213	214	216	217	219
120	234	235	237	240	242	245	247	250	251	253	254	256	257	258	259	261	262	263	265
125	282	284	286	288	291	293	296	298	299	301	302	303	304	305	306	307	308	309	311
130	330	331	333	335	338	340	342	345	346	347	348	349	350	350	351	352	353	355	356
135	375	377	379	381	383	385	387	389	390	391	392	393	394	395	396	396	397	399	400
140	419	420	422	423	425	427	429	431	432	433	434	435	435	436	437	438	439	440	442
145	459	460	461	463	465	466	468	470	471	471	472	473	474	474	475	476	477	478	479
150	496	497	498	499	501	502	504	505	506	506	507	508	508	509	510	510	511	512	513
155	528	529	530	531	532	533	534	535	536	537	538	538	539	540	540	541	542	543	543
160	556	557	558	558	559	560	561	562	562	563	563	564	564	565	565	566	566	567	568
165	579	579	580	580	581	582	582	583	583	583	584	584	584	584	585	585	585	586	587
170	597	597	597	597	598	598	598	598	598	598	599	599	599	599	599	599	600	600	601
175	608	608	608	608	608	608	608	608	608	608	608	608	608	608	609	609	609	609	609
180	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.8V I:0.4350A P:52.40W PF:0.9900 Freq:60.00Hz Lamp Flux:6105.94x1 lm																	
NAME: WL-21LSUD4FT50WB2D1HV-30K-3.7-WH									TYPE:30K 3.7						WEIGHT:		
SPEC.:									DIM.: 4FT						SERIAL No.:		
MFR.: WS									SUR.:1.13*0.05						Shielding Angle:		

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	1601	1600	1599	1598	1597	1597	1597	1598	1599	1601	1603	1606	1609	1613	1617				
5	1591	1589	1586	1584	1582	1581	1580	1580	1581	1582	1584	1586	1589	1592	1596				
10	1564	1560	1557	1554	1551	1549	1547	1546	1546	1547	1548	1550	1552	1555	1558				
15	1519	1515	1511	1507	1503	1500	1497	1496	1496	1496	1497	1498	1500	1502	1505				
20	1463	1458	1452	1447	1443	1438	1435	1433	1432	1431	1432	1432	1434	1436	1439				
25	1394	1387	1381	1375	1369	1364	1359	1356	1354	1353	1353	1353	1354	1356	1358				
30	1312	1305	1298	1291	1284	1278	1273	1270	1267	1265	1264	1264	1264	1266	1267				
35	1221	1213	1205	1197	1190	1184	1177	1174	1171	1168	1167	1166	1166	1167	1168				
40	1120	1112	1103	1095	1087	1080	1074	1069	1066	1063	1061	1060	1060	1060	1061				
45	1013	1004	995	987	979	971	964	959	955	952	950	949	948	948	949				
50	899	890	881	872	863	855	848	843	838	835	832	829	828	827	827				
55	778	768	759	750	741	732	725	719	714	710	706	704	702	700	699				
60	651	641	630	620	611	601	593	587	582	577	574	571	569	567	567				
65	521	510	500	489	479	469	460	454	448	444	440	437	434	433	432				
70	388	377	366	356	345	335	326	320	314	309	306	302	300	299	298				
75	256	245	235	224	214	204	195	189	184	180	176	173	171	170	169				
80	134	125	116	107	98.2	90.2	82.7	77.7	73.5	69.9	67.1	65.0	63.6	63.0	63.1				
85	38.6	33.9	29.3	24.9	20.8	16.9	13.4	11.1	9.18	7.67	6.56	5.87	5.59	5.72	6.27				
90	2.93	3.55	4.27	5.03	5.82	6.61	7.35	7.61	7.80	7.91	7.96	7.94	7.84	7.68	7.44				
95	37.2	37.5	37.5	37.4	37.1	36.8	36.3	35.9	35.5	34.9	34.3	33.5	32.7	31.7	30.7				
100	82.0	82.8	83.4	83.8	84.0	84.0	83.8	83.5	83.0	82.3	81.4	80.4	79.1	77.7	76.1				
105	127	128	128	129	129	130	130	130	129	129	129	128	127	126	125				
110	174	175	176	177	177	178	178	178	178	178	177	177	176	175	174				
115	220	221	222	223	224	225	226	226	226	226	226	225	225	224	223				
120	266	268	269	270	272	272	273	274	274	274	274	274	273	272	272				
125	313	314	316	317	319	320	321	322	322	322	322	321	321	320	319				
130	358	360	361	363	364	366	367	367	367	367	367	367	367	366	365				
135	402	404	405	406	408	409	410	410	411	411	411	410	410	409	408				
140	443	444	446	447	448	449	450	451	451	451	451	451	451	450	449				
145	481	482	483	484	485	487	487	488	488	488	488	488	488	487	487				
150	514	516	517	518	519	520	521	521	521	522	522	521	521	521	520				
155	544	545	546	547	548	549	549	550	550	550	550	550	550	550	550				
160	568	569	570	571	571	572	573	573	574	574	574	574	574	574	574				
165	587	588	589	589	590	591	591	591	592	592	592	592	592	592	592				
170	601	602	602	603	603	604	604	604	605	605	605	606	606	606	606				
175	609	610	610	610	611	611	611	611	612	612	612	612	612	613	613				
180	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks: