

# GONIOPHOTOMETERS SYSTEM TEST REPORT

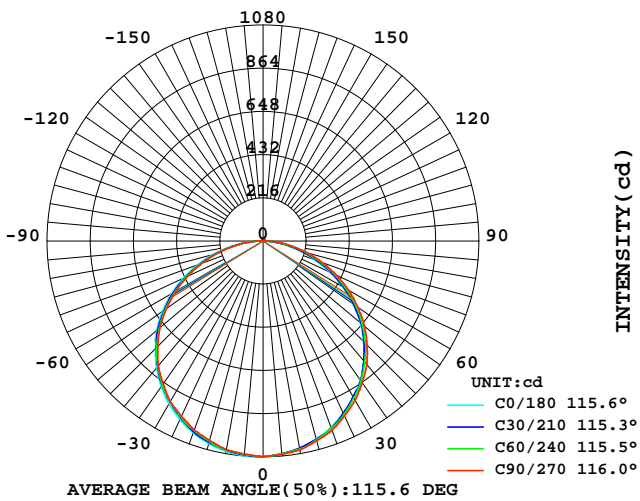
## LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: 16061803

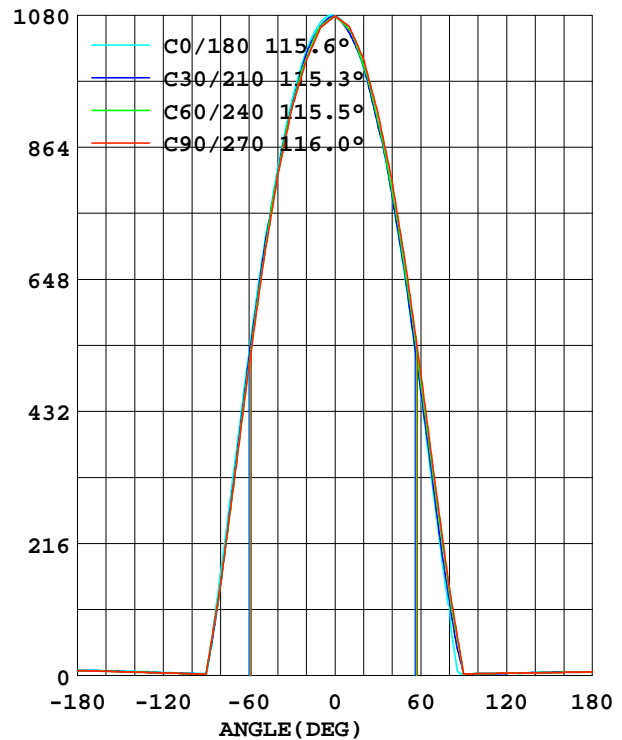
MANUFACTURER: TulipLED B. V.	Address:SGSLight Limited	
NAME: TLP-X-1512N-36-IP65	TYPE:LED Panel Light	WEIGHT:
SPECIFICATION:4000K CRI>80	DIMENSION: 150x1196mm	SERIAL No.:16061803

DATA OF LAMP		I <sub>max</sub> (cd)	1080	S/MH(C0/180)	1.29
MODEL	4000K	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.28
NOMINAL POWER(W)	36	TOTAL FLUX(lm)	3213.1	Voltage(V)	230.0
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	90.1	Current(A)	0.185
NOMINAL FLUX(lm)	3213.2	η up(%)	0.7	Power(W)	35.68
LAMPS QUANTITY	1	η down(%)	99.3	Power Factor(PF)	0.937
TEST VOLTAGE(V)	230.0	Effictive Flux(lm)	3213.2	EEI	0.151

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1900  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2016-06-18

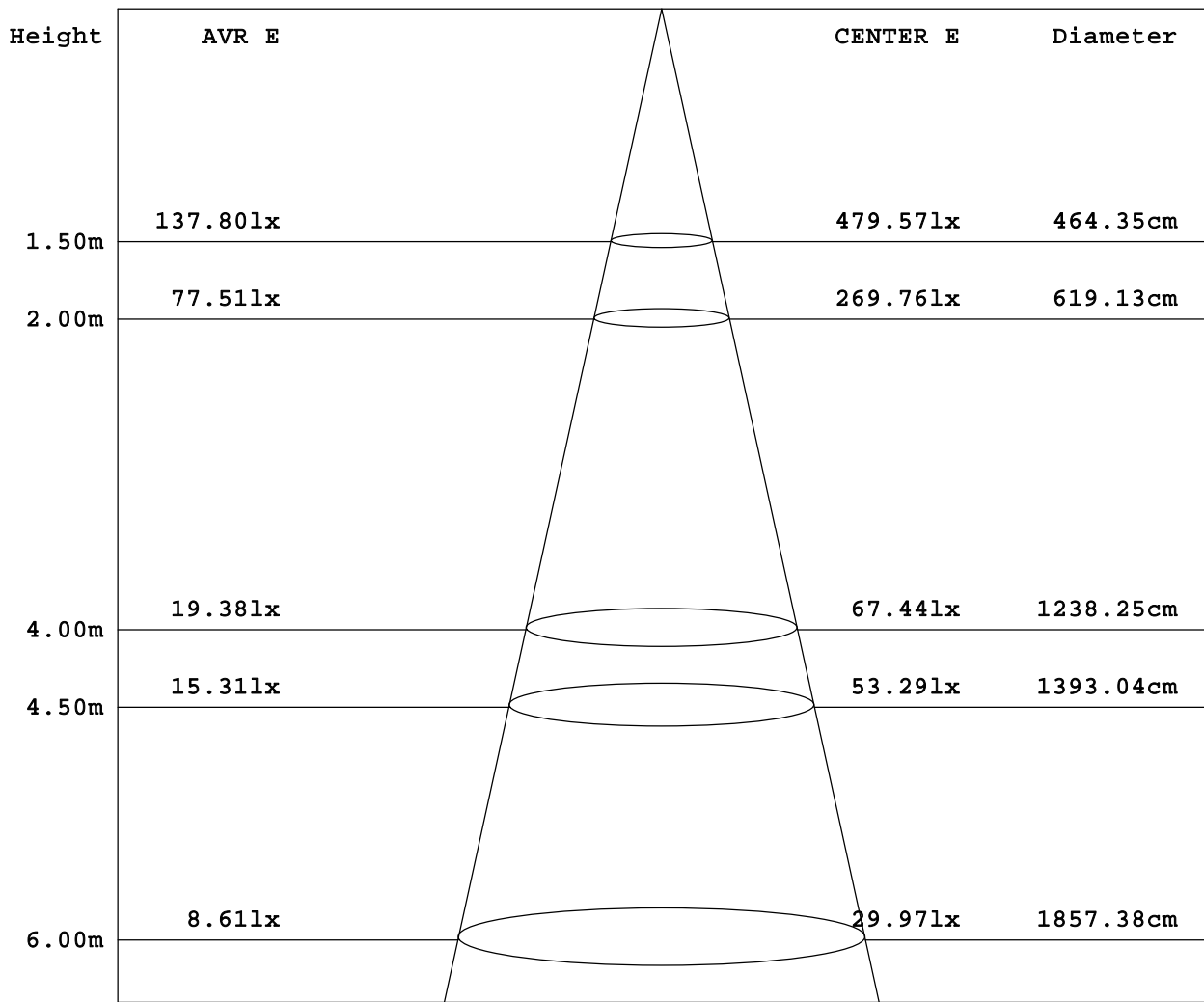
Test Set: 7.0deg/s B-Beta (TYPE B)  
 Humidity:65.0%  
 Test Distance:7.000 m  
 Remarks:

**GONIOPHOTOMETERS SYSTEM TEST REPORT**

**AVERAGE AND CENTER E Figure**

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MANUFACTURER: TulipLED B. V.	Address:SGSLight Limited	
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SPECIFICATION:4000K CRI>80	DIMENSION: 150x1196mm	SERIAL No.:16061803



Angle:114.3deg

Test System:HOPOO HPG1900  
 Temperature:25.3DEG  
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 Test Date:2016-06-18

Test Set: 7.0deg/s B-Beta (TYPE B)  
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# GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Report number: 16061803

MANUFACTURER: TulipLED B. V.	Address:SGSLight Limited	
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SPECIFICATION:4000K CRI>80	DIMENSION: 150x1196mm	SERIAL No.:16061803

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	1079	1073	1070	1068	1071	1068	1070	1074	0- 5	25.68	25.68
10.0	1068	1062	1060	1052	1053	1054	1062	1063	5- 10	76.17	101.8
15.0	1049	1043	1033	1030	1028	1031	1035	1046	10- 15	124.2	226.0
20.0	1022	1010	1006	994.4	993.9	994.6	1009	1014	15- 20	168.1	394.2
25.0	985.2	974.8	967.3	954.4	950.6	954.5	965.0	978.8	20- 25	206.7	600.9
30.0	940.8	930.6	928.5	907.0	901.5	904.5	921.2	933.5	25- 30	238.5	839.5
35.0	888.4	881.3	872.4	854.3	848.1	847.4	864.9	880.6	30- 35	263.1	1103
40.0	829.2	826.6	816.2	798.2	783.9	787.2	808.7	824.0	35- 40	279.3	1382
45.0	761.3	756.8	745.5	728.6	711.1	716.2	736.2	754.5	40- 45	286.3	1668
50.0	695.2	684.1	674.7	656.5	634.7	642.7	663.7	683.0	45- 50	283.7	1952
55.0	614.0	599.6	590.3	576.7	548.7	560.1	579.6	597.5	50- 55	271.6	2224
60.0	530.0	514.1	505.9	496.1	461.8	477.3	495.5	511.3	55- 60	249.9	2474
65.0	438.7	422.3	415.3	405.8	367.9	385.4	405.6	421.3	60- 65	220.2	2694
70.0	348.0	329.2	324.7	316.5	276.5	296.4	315.7	329.5	65- 70	183.3	2877
75.0	256.7	234.3	236.2	229.8	186.0	210.5	229.6	234.9	70- 75	141.9	3019
80.0	167.1	148.6	147.7	144.8	114.4	129.5	143.5	150.7	75- 80	98.53	3118
85.0	78.55	71.63	75.05	68.82	15.10	59.66	73.22	74.74	80- 85	55.57	3173
90.0	6.521	2.541	2.349	4.603	3.213	3.069	2.877	5.802	85- 90	18.26	3192
95.0	3.165	2.846	2.685	3.512	2.397	3.211	3.045	3.945	90- 95	1.729	3193
100.0	4.028	3.145	3.021	2.504	2.014	3.395	3.213	2.092	95-100	1.576	3195
105.0	3.980	3.437	3.356	1.716	2.397	3.566	3.380	0.277	100-105	1.413	3196
110.0	4.411	3.746	3.692	1.174	2.829	3.704	3.548	0	105-110	1.308	3198
115.0	4.795	4.095	4.028	1.081	3.308	3.822	3.716	0	110-115	1.304	3199
120.0	5.227	4.375	4.363	1.380	3.788	3.961	3.884	0	115-120	1.333	3200
125.0	5.610	4.723	4.699	2.038	3.884	4.259	4.052	0	120-125	1.363	3202
130.0	6.042	5.267	5.035	2.993	3.548	4.207	4.220	0	125-130	1.376	3203
135.0	6.426	5.333	5.370	4.141	4.795	4.500	4.387	0	130-135	1.390	3204
140.0	6.809	5.859	5.706	5.426	5.179	4.632	4.555	0	135-140	1.388	3206
145.0	6.809	6.366	6.042	6.175	5.562	5.014	4.723	0	140-145	1.377	3207
150.0	7.193	6.624	6.378	6.949	5.514	5.153	4.891	0	145-150	1.361	3208
155.0	8.008	6.870	6.713	6.870	5.083	5.285	5.059	0	150-155	1.280	3210
160.0	8.008	7.423	7.049	7.108	5.898	5.414	5.227	0.386	155-160	1.135	3211
165.0	8.392	7.671	7.385	7.671	5.898	5.538	5.394	2.518	160-165	0.941	3212
170.0	8.392	7.915	7.720	7.915	5.898	5.659	5.562	4.243	165-170	0.733	3213
175.0	8.392	8.154	8.056	8.154	5.898	5.779	5.730	5.413	170-175	0.478	3213
180.0	8.392	8.392	8.392	8.392	5.898	5.898	5.898	5.898	175-180	0.167	3213
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1900  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2016-06-18

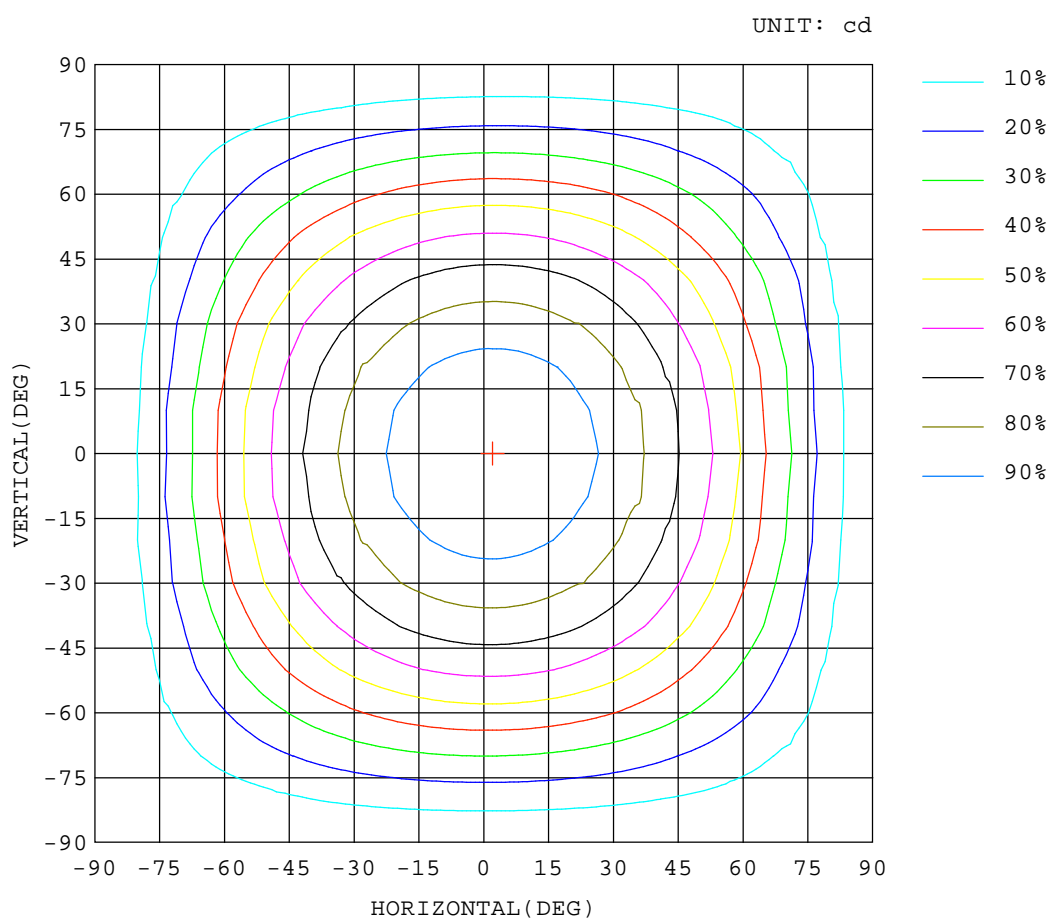
Test Set: 7.0deg/s B-Beta (TYPE B)  
 Humidity:65.0%  
 Test Distance:7.000 m  
 Remarks:

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## ISOCANDELA DIAGRAM

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Temperature:25.3DEG  
Operators:Jason  
Test Date:2016-06-18

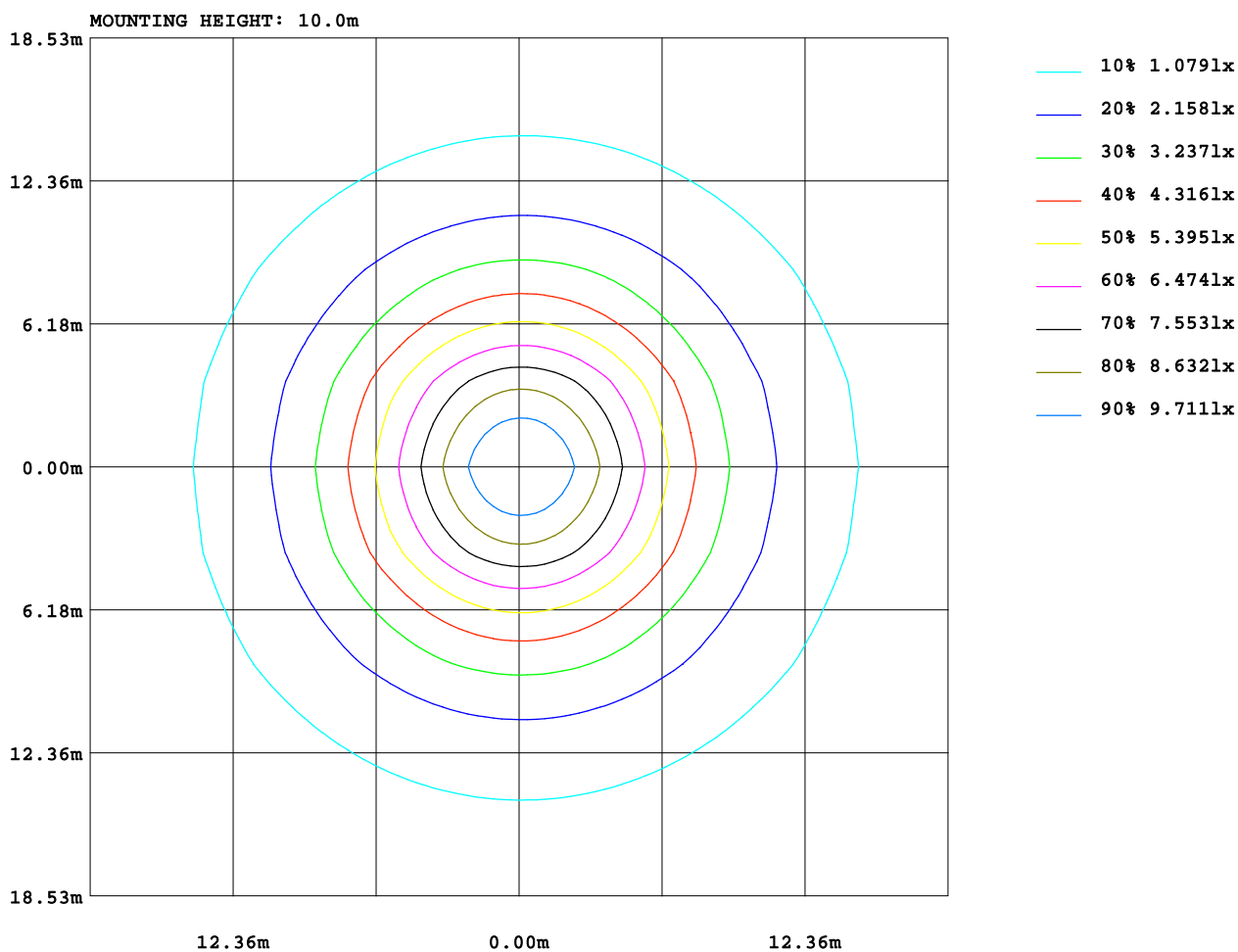
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Humidity:65.0%  
Test Distance:7.000 m  
Remarks:

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## ISOLUX DIAGRAM

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MANUFACTURER: TulipLED B. V.	Address:SGSLight Limited	
NAME: TLP-X-1512N-36-IP65	TYPE:LED Panel Light	WEIGHT:
SPECIFICATION:4000K CRI>80	DIMENSION: 150x1196mm	SERIAL No.:16061803



Test System:HOPOO HPG1900  
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 Operators:Jason  
 Test Date:2016-06-18

Test Set: 7.0deg/s B-Beta (TYPE B)  
 Humidity:65.0%  
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**Uncorrected UGR Table**

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MANUFACTURER: TulipLED B. V.					Address:SGSLight Limited					
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SPECIFICATION:4000K CRI>80					DIMENSION: 150x1196mm			SERIAL No.:16061803		
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	19.2	20.7	19.4	20.9	21.1	19.0	20.5	19.3	20.8	21.0
3H	20.8	22.2	21.1	22.5	22.7	20.6	22.0	20.9	22.3	22.5
4H	21.5	22.8	21.8	23.1	23.4	21.3	22.6	21.6	22.9	23.2
6H	22.0	23.3	22.4	23.6	23.9	21.8	23.1	22.1	23.3	23.6
8H	22.2	23.5	22.6	23.8	24.1	22.0	23.2	22.3	23.5	23.8
12H	22.4	23.5	22.7	23.9	24.2	22.1	23.3	22.5	23.6	23.9
4H 2H	19.8	21.1	20.1	21.4	21.7	19.7	21.0	20.0	21.3	21.6
3H	21.6	22.8	22.0	23.1	23.4	21.4	22.6	21.8	22.9	23.3
4H	22.4	23.5	22.8	23.8	24.2	22.2	23.3	22.6	23.7	24.0
6H	23.1	24.1	23.5	24.4	24.8	22.9	23.8	23.3	24.2	24.6
8H	23.3	24.2	23.8	24.6	25.0	23.1	24.0	23.6	24.4	24.8
12H	23.5	24.3	23.9	24.7	25.1	23.3	24.2	23.8	24.6	25.0
8H 4H	22.7	23.6	23.1	24.0	24.4	22.5	23.4	23.0	23.8	24.2
6H	23.5	24.3	24.0	24.7	25.1	23.4	24.1	23.8	24.5	25.0
8H	23.8	24.5	24.3	24.9	25.4	23.7	24.4	24.2	24.8	25.3
12H	24.1	24.7	24.6	25.1	25.6	24.0	24.6	24.5	25.0	25.5
12H 4H	22.7	23.5	23.2	23.9	24.4	22.6	23.4	23.0	23.8	24.2
6H	23.6	24.2	24.1	24.7	25.2	23.4	24.1	23.9	24.5	25.0
8H	24.0	24.5	24.4	25.0	25.5	23.8	24.4	24.3	24.9	25.3
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	+ 0.1 / - 0.2					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 3213 lm Total Lamp Luminous Flux. (8log(F/F0) = 4.1)

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