

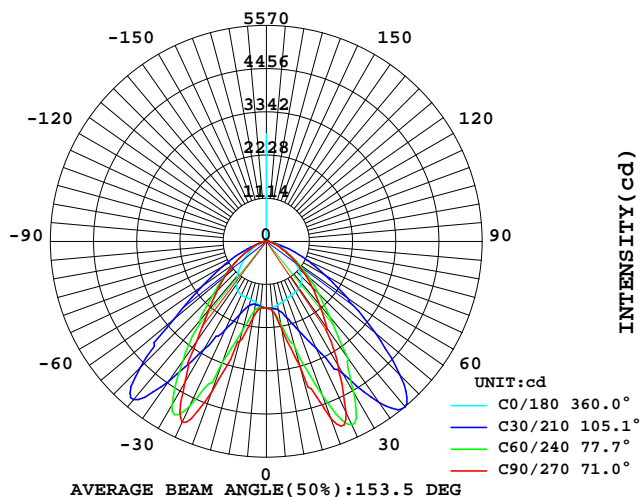
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

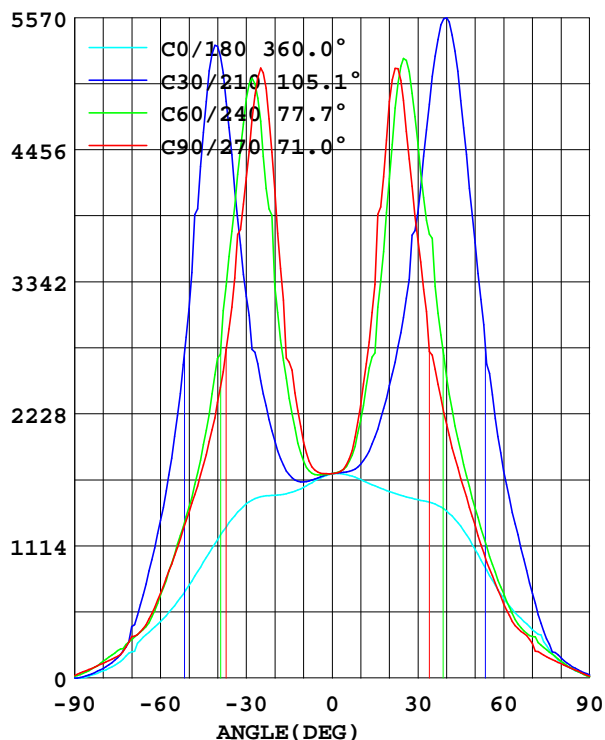
MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

DATA OF LAMP		I _{max} (cd)	5570	S/MH(C0/180)	1.26
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.61
NOMINAL POWER(W)	64	TOTAL FLUX(lm)	9005.7	Voltage(V)	218.6
RATED VOLTAGE(V)	218	EFFICIENCY(lm/W)	139.9	Current(A)	0.302
NOMINAL FLUX(lm)	9005.8	h up(%)	0.0	Power(W)	64.36
LAMPS QUANTITY	1	h down(%)	100.0	Power Factor(PF)	0.972
TEST VOLTAGE(V)	218.6	Effective Flux(lm)	8470.8	EEI	0.103

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



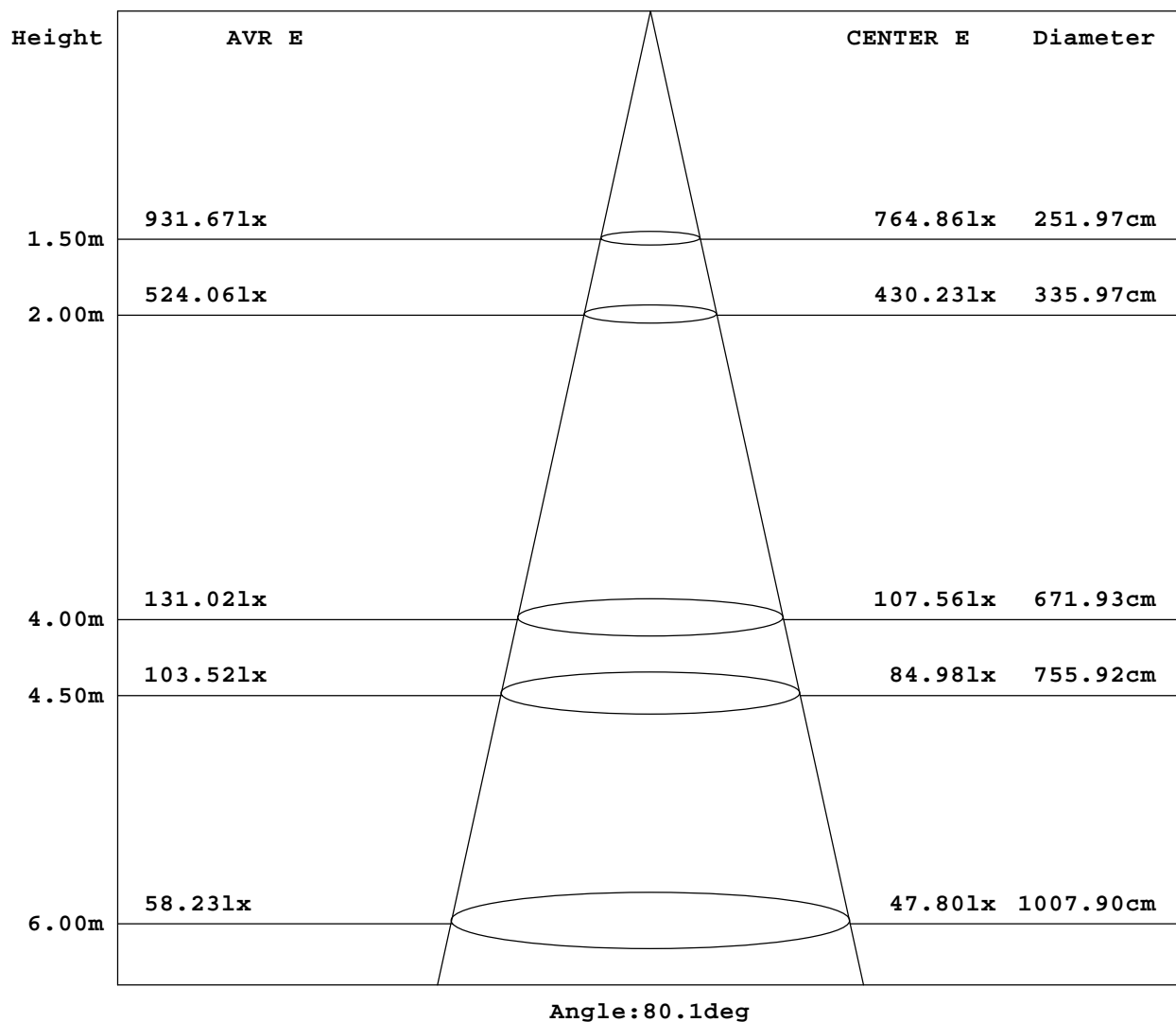
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 11.000 m
 Remarks:

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Zone	tStal
5.0	1676	1700	1738	1726	1716	1761	1799	1727	0- 5	41.23	41.23
10.0	1608	1743	1988	1793	1674	1986	2293	1876	5- 10	127.7	168.9
15.0	1561	2036	2664	2086	1621	2387	3320	2251	10- 15	243.0	412.0
20.0	1541	2654	4122	2656	1574	3338	4861	3030	15- 20	425.9	838.0
25.0	1529	3602	5145	3555	1534	4132	4871	3917	20- 25	702.6	1541
30.0	1470	4053	4219	4010	1506	4220	3699	4160	25- 30	931.1	2472
35.0	1340	4090	3129	3945	1476	4391	2722	4253	30- 35	1043	3514
40.0	1166	4012	2327	3971	1409	4051	2141	3962	35- 40	1125	4640
45.0	979.9	3286	1797	3806	1280	3392	1682	3137	40- 45	1121	5761
50.0	780.7	2276	1394	2951	1085	2552	1289	2180	45- 50	966.7	6728
55.0	609.7	1538	1034	2095	862.6	1797	918.9	1446	50- 55	747.9	7476
60.0	476.4	1014	714.5	1409	675.0	1230	626.0	969.1	55- 60	550.5	8026
65.0	364.6	613.1	450.3	919.6	525.9	831.6	416.4	622.1	60- 65	388.5	8415
70.0	220.7	378.5	348.6	618.2	407.4	531.9	289.0	326.7	65- 70	264.7	8679
75.0	121.7	201.3	183.3	363.6	274.3	284.4	178.6	189.3	70- 75	163.2	8843
80.0	60.20	110.1	123.9	174.4	130.7	156.8	122.0	99.05	75- 80	92.74	8935
85.0	14.83	43.45	70.85	86.82	60.81	73.58	66.98	35.28	80- 85	49.09	8985
90.0	0	7.477	20.64	26.02	16.52	18.10	15.43	3.521	85- 90	18.26	9003
95.0	0	0.218	0	2.395	0	0	0.920	0	90- 95	2.723	9006
100.0	0	0	0	0	0	0	0	0	95-100	0.052	9006
105.0	0	0	0	0	0	0	0	0	100-105	0	9006
110.0	0	0	0	0	0	0	0	0	105-110	0	9006
115.0	0	0	0	0	0	0	0	0.641	110-115	0.027	9006
120.0	0	0	0	0	0	0	0	1.403	115-120	0.087	9006
125.0	0	0	0	0	0	0	0	0	120-125	0.011	9006
130.0	0	0	0	0	0	0	0	0	125-130	0	9006
135.0	0	0	0	0	0	0	0	0	130-135	0	9006
140.0	0	0	0	0	0	0	0	0	135-140	0	9006
145.0	0	0	0	0	0	0	0	0	140-145	0	9006
150.0	0	0	0	0	0	0	0	0	145-150	0	9006
155.0	0	0	0	0	0	0	0	0	150-155	0	9006
160.0	0	0	0	0	0	0	0	0	155-160	0	9006
165.0	0	0	0	0	0	0	0	0	160-165	0	9006
170.0	0	0	0	0	0	0	0	0	165-170	0	9006
175.0	0	0	0	0	0	0	0	0	170-175	0	9006
180.0	0	0	0	0	0	0	0	0	175-180	0	9006
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

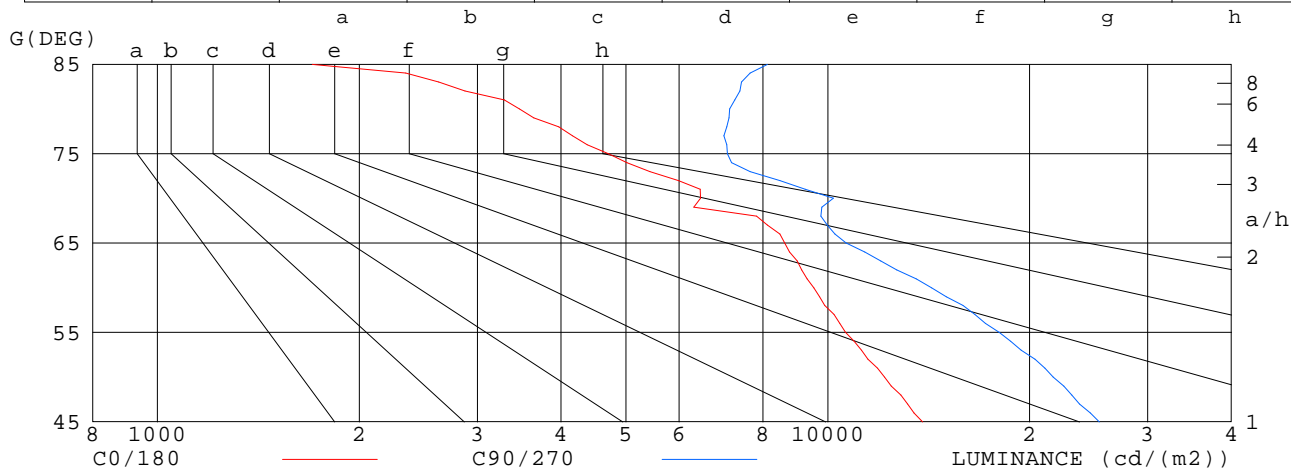
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/m2		
G(DEG)	C0/180	C90/270
85	1702	8130
80	3467	7140
75	4706	7086
70	6455	10195
65	8628	10655
60	9529	14292
55	10631	18023
50	12147	21694
45	13858	25407

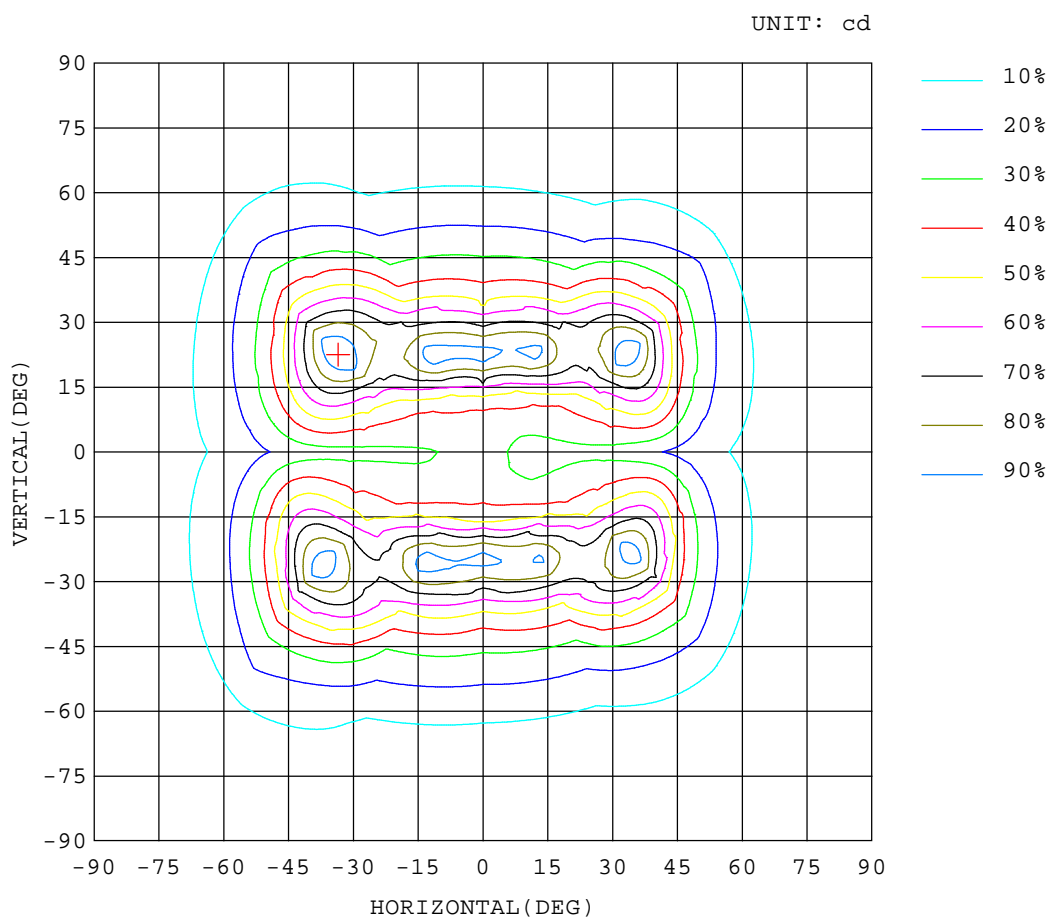
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



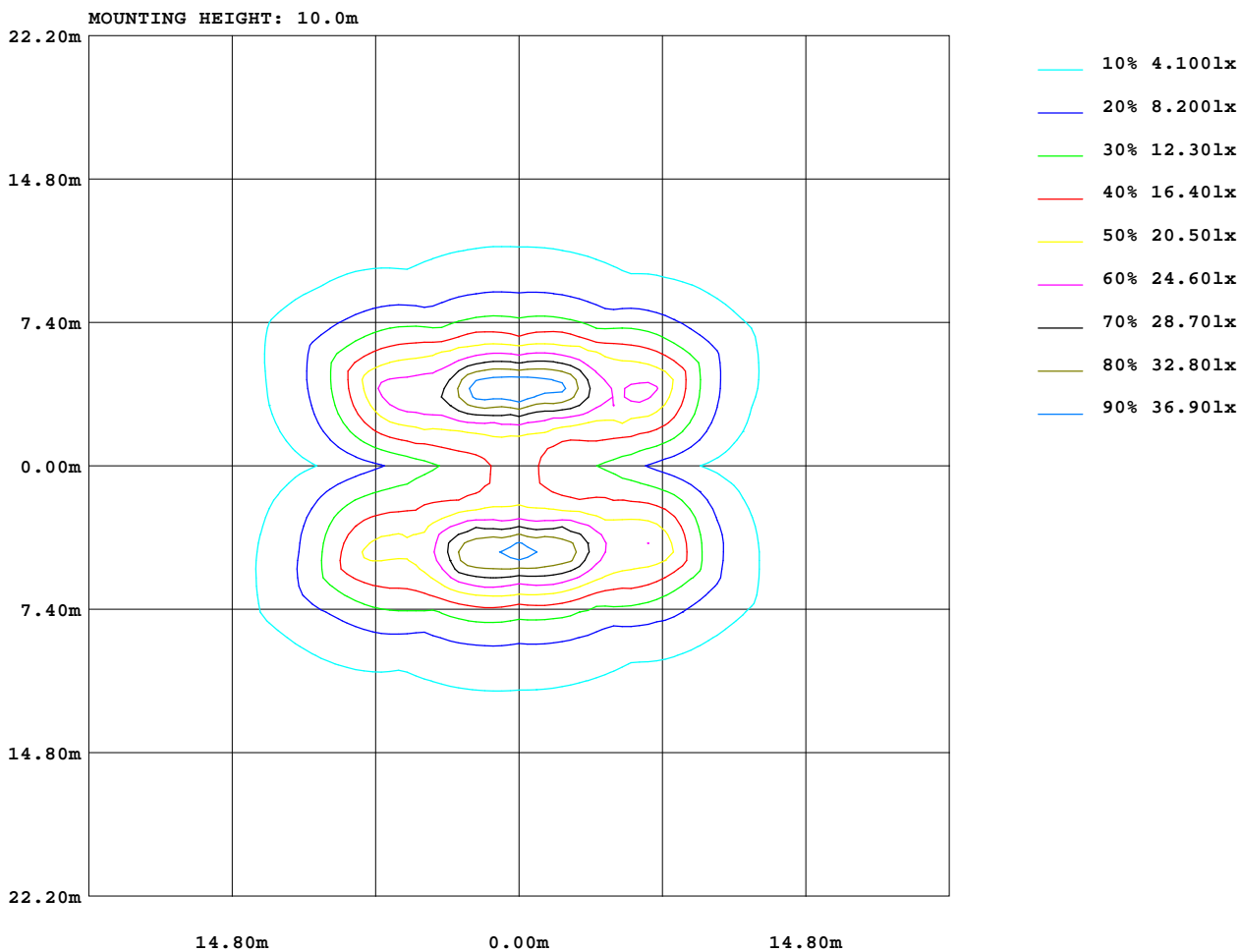
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

AREA LUMINOUS FLUX

Report number:

MANUFACTURER:																			
Address:																			
NAME: 25°+90°+25°64W										TYPE:					WEIGHT:				
SPECIFICATION:										DIMENSION: 576*188mm					SERIAL No.:				

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT:lm		Φ t	Φ a
	0.06	0.26	0.59	0.94	1.22	1.45	1.69	1.91	2.01	1.88	1.53	1.12	0.79	0.54	0.33	0.15	0.04	0.00				
90																						
80																			16.5	0.00		
70																			53.5	0.00		
60																			117	10.9		
50																			249	223		
40																			473	462		
30																			830	821		
																			1205	1197		
																			959	950		
																			567	556		
																			537	526		
																			857	848		
-30																			1211	1202		
-40																			914	905		
-50																			520	509		
-60																			280	259		
-70																			131	33.1		
-80																			60.1	0.00		
-90																			20.5	0.00		
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)				20	30	40	50	60	70	80	90		
Φ t	2.82	24.7	95.7	269	608	902	892	956	992	972	910	849	817	466	180	55.1	11.1	0.77	9006			
Φ a	0.00	0.00	57.6	247	585	873	855	919	956	936	873	812	786	440	154	9.34	0.00	0.00		8471		

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

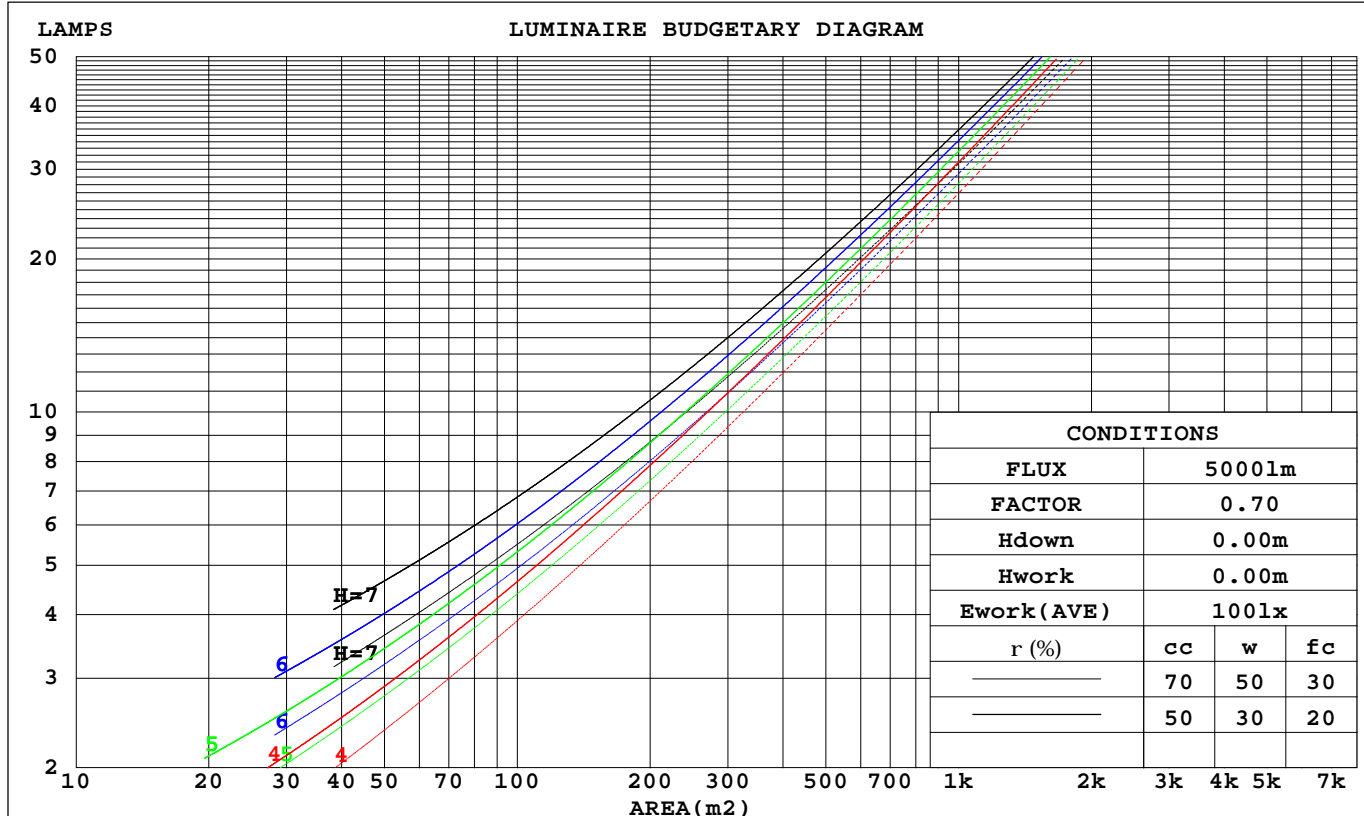
Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: 25°+90°+25°64W								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 576*188mm				SERIAL No.:			

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

WEC AND CCEC

Report number:

MANUFACTURER:											
Address:											
NAME: 25°+90°+25°64W						TYPE:			WEIGHT:		
SPECIFICATION:						DIMENSION: 576*188mm			SERIAL No.:		

rcc	80%			70%			50%			30%			10%			0														
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
rfc	20%			20%			20%			20%			20%			0														
RCR	RCR:Room Cavity Ratio															Wall Exitance Coefficients(WEC)														
0.0																														
1.0	.268	.152	.048	.261	.149	.047	.248	.142	.045	.236	.136	.044	.224	.130	.042															
2.0	.259	.142	.044	.253	.140	.043	.242	.135	.042	.231	.130	.041	.222	.125	.040															
3.0	.246	.131	.039	.241	.129	.039	.231	.125	.038	.221	.121	.037	.213	.118	.036															
4.0	.231	.120	.035	.227	.119	.035	.218	.116	.034	.210	.113	.034	.202	.110	.033															
5.0	.217	.111	.032	.213	.109	.032	.205	.107	.031	.198	.104	.031	.191	.102	.031															
6.0	.204	.102	.029	.200	.101	.029	.193	.099	.029	.187	.097	.029	.181	.095	.028															
7.0	.192	.095	.027	.189	.094	.027	.182	.092	.027	.176	.090	.026	.171	.089	.026															
8.0	.181	.088	.025	.178	.088	.025	.172	.086	.025	.167	.085	.024	.162	.083	.024															
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.153	.078	.023															
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.021															

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.157	.138	.152	.135	.119	.104	.093	.082	.060	.054	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.099	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.099	.068	.094	.069	.047	.054	.040	.028	.017	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.125	.078	.043	.086	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.120	.071	.035	.083	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.030	.110	.060	.026	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.026	.105	.056	.023	.073	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

Uncorrected UGR Table

Report number:

MANUFACTURER:											
Address:											
NAME: 25°+90°+25°64W						TYPE:		WEIGHT:			
SPECIFICATION:						DIMENSION: 576*188mm		SERIAL No.:			
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		24.4	25.9	24.7	26.1	26.3	22.7	24.1	22.9	24.3	24.5
3H		24.6	25.9	24.9	26.1	26.4	23.0	24.3	23.3	24.5	24.8
4H		24.5	25.8	24.8	26.0	26.3	23.1	24.3	23.4	24.6	24.8
6H		24.5	25.6	24.8	25.9	26.2	23.2	24.3	23.5	24.6	24.9
8H		24.4	25.6	24.8	25.8	26.1	23.2	24.3	23.5	24.6	24.9
12H		24.4	25.5	24.7	25.8	26.0	23.2	24.3	23.6	24.6	24.9
4H 2H		24.5	25.8	24.9	26.0	26.3	23.1	24.3	23.4	24.6	24.8
3H		24.8	25.9	25.1	26.2	26.5	23.5	24.6	23.8	24.8	25.1
4H		24.8	25.8	25.2	26.1	26.4	23.7	24.6	24.0	24.9	25.3
6H		24.8	25.6	25.2	26.0	26.3	23.8	24.7	24.2	25.0	25.4
8H		24.7	25.5	25.2	25.9	26.3	23.9	24.7	24.3	25.1	25.4
12H		24.7	25.4	25.1	25.8	26.2	24.0	24.7	24.4	25.1	25.5
8H 4H		24.8	25.6	25.2	25.9	26.3	23.7	24.5	24.1	24.8	25.2
6H		24.8	25.4	25.2	25.8	26.3	24.0	24.6	24.4	25.0	25.4
8H		24.8	25.3	25.2	25.8	26.2	24.1	24.7	24.5	25.1	25.5
12H		24.7	25.2	25.2	25.7	26.2	24.2	24.7	24.7	25.1	25.6
12H 4H		24.7	25.5	25.2	25.9	26.3	23.7	24.4	24.1	24.8	25.2
6H		24.8	25.3	25.2	25.8	26.2	23.9	24.5	24.4	24.9	25.4
8H		24.8	25.3	25.2	25.7	26.2	24.1	24.6	24.6	25.0	25.5
Variations with the observer position at spacings:											
S = 1.0H		+ 2.7 / - 1.8					+ 0.8 / - 1.2				
1.5H		+ 1.7 / - 4.5					+ 1.1 / - 0.8				
2.0H		+ 3.1 / - 4.7					+ 1.1 / - 1.9				

CIE Pub.117 Corrected 9006 lm Total Lamp Luminous Flux.(8log(F/F0) = 7.6)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

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	61	50	43	60	50	43	59	49	43	37
0.80	72	61	54	71	60	54	69	60	53	47
1.00	81	71	64	79	70	64	77	71	63	57
1.25	88	78	72	86	78	72	84	76	71	64
1.50	92	84	78	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	84	76
2.50	102	95	90	100	94	89	96	91	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

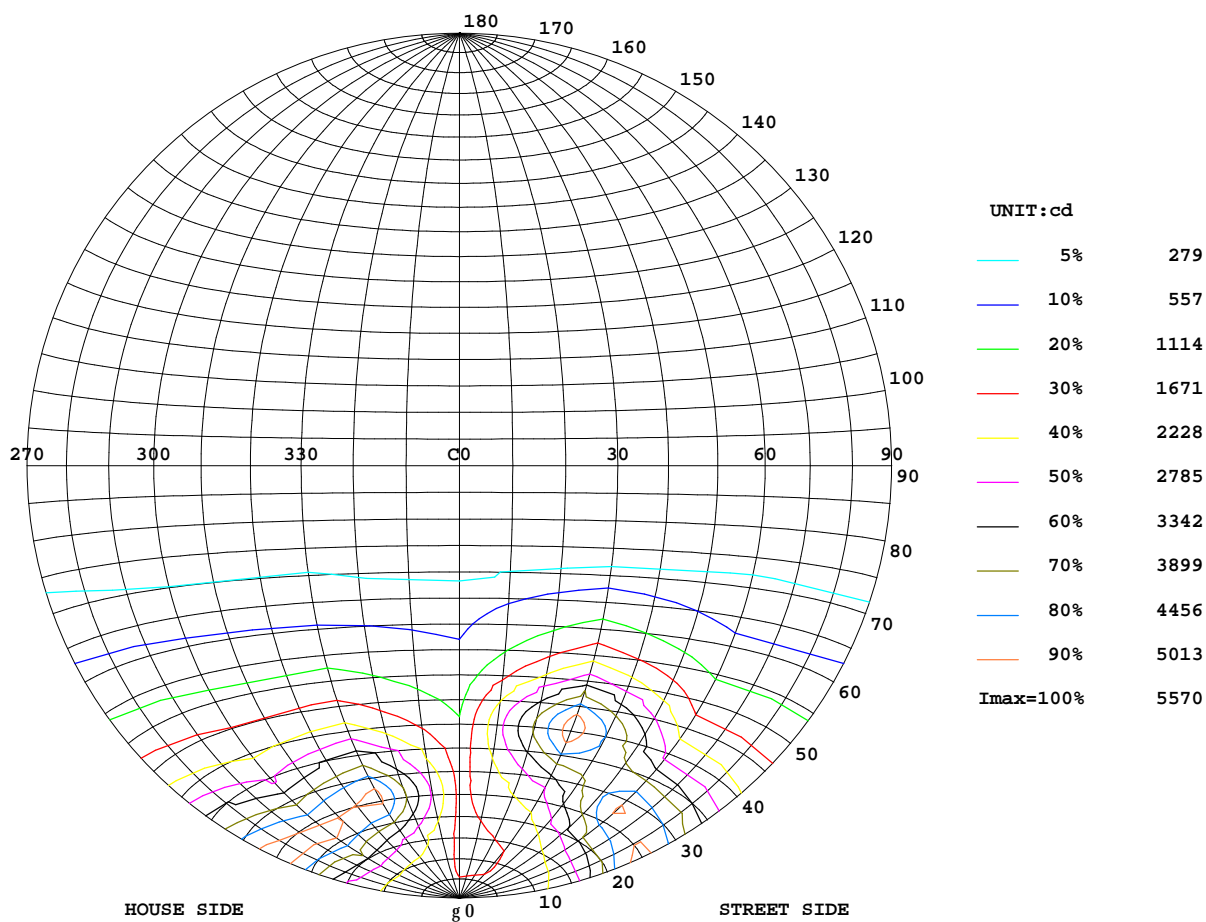
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 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

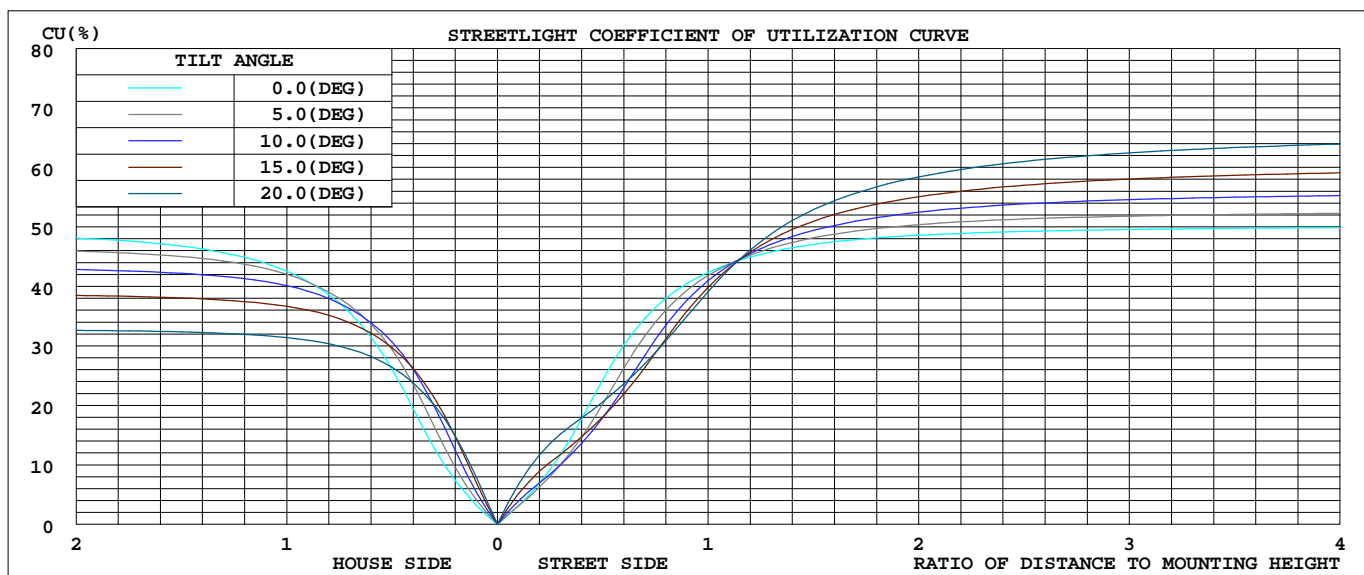
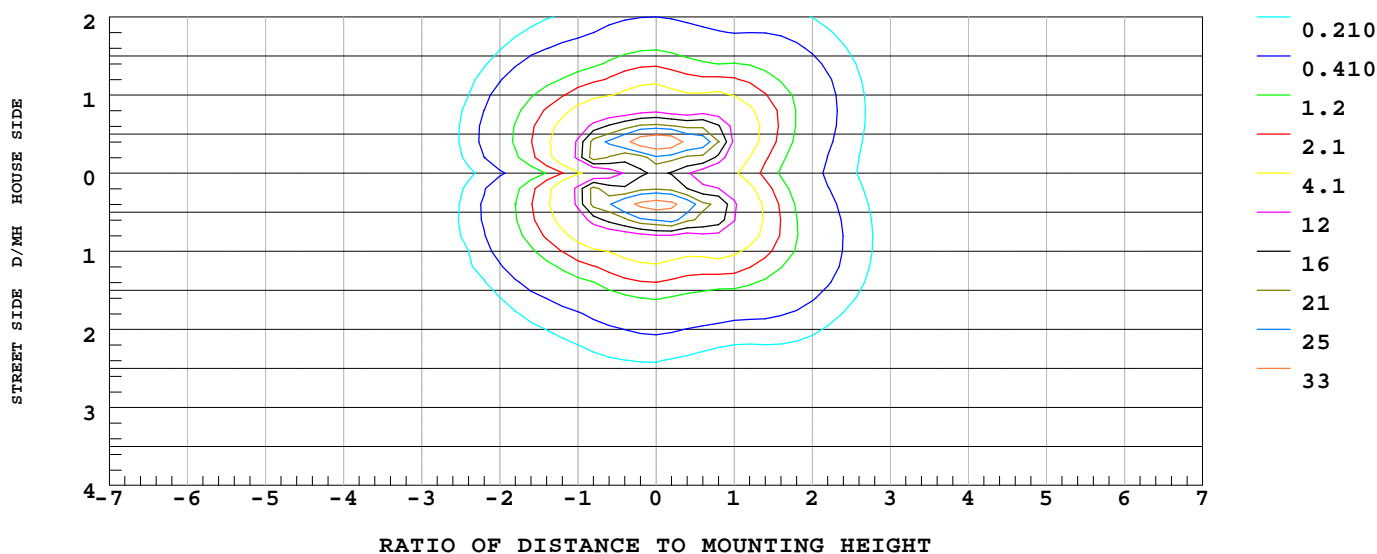
Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:

ILLUMINANCE AT MH=10 m, Enadir = 17.21 lx



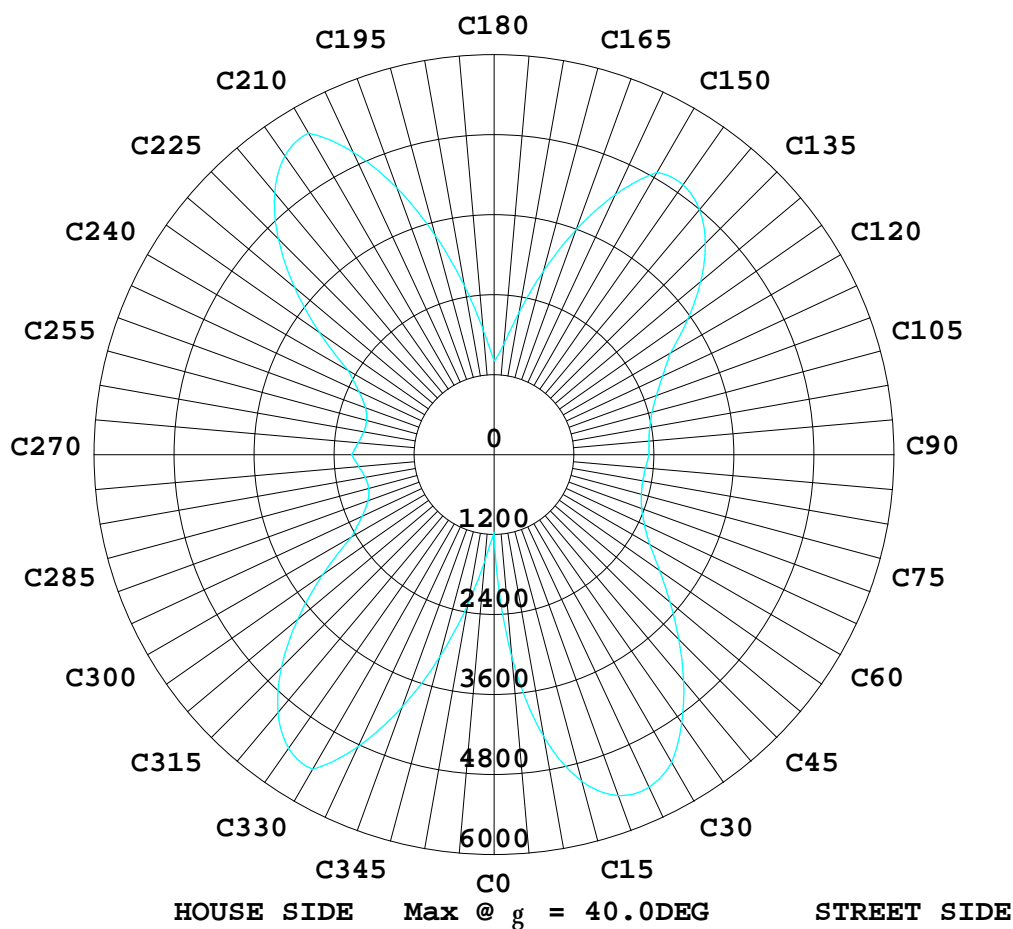
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: 25°+90°+25°64W	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 576*188mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2019年08月10日

Test Set: 8.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks: