

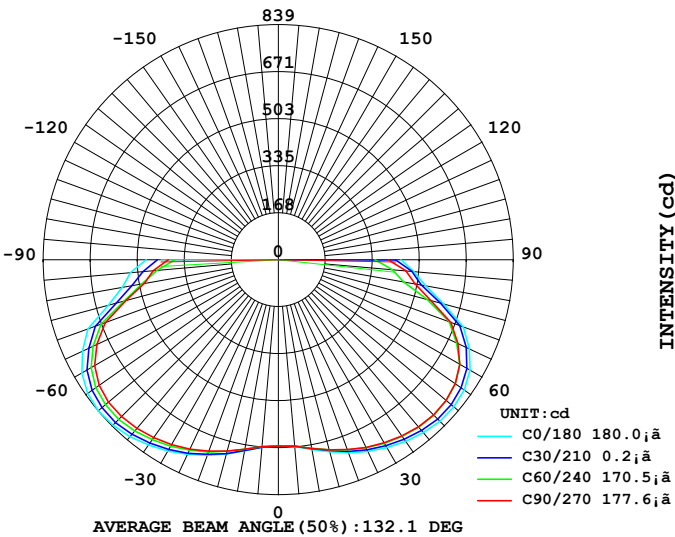
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

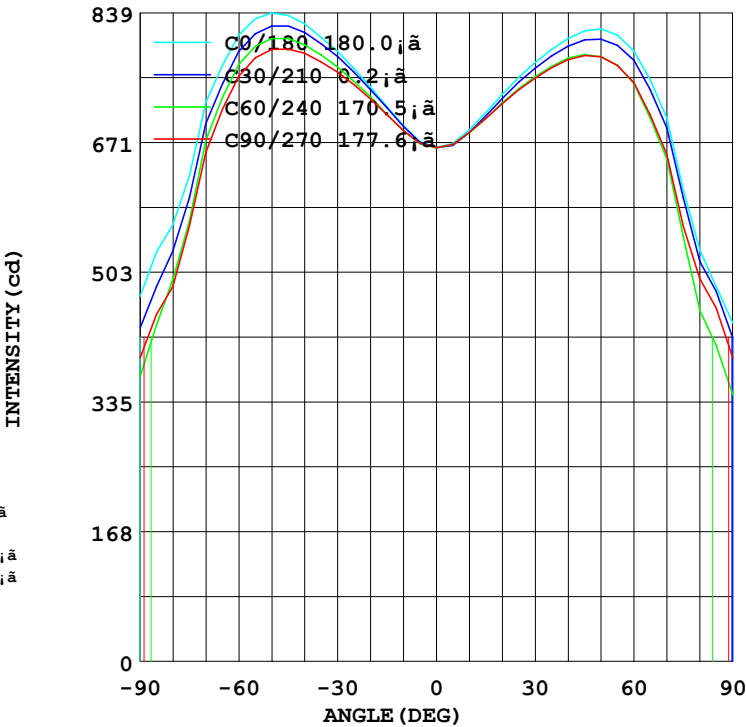
MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:

DATA OF LAMP		Imax (cd)	838.5	S/MH (C0/180)	1.84
MODEL	FIRE FOX RING	EFFICIENCY (%)	100.0	S/MH (C90/270)	1.77
NOMINAL POWER (W)	49	TOTAL FLUX (lm)	4261.7	Voltage (V)	219.6
RATED VOLTAGE (V)	220	EFFICIENCY (lm/W)	87.0	Current (A)	0.224
NOMINAL FLUX (lm)	4261.7	η up (%)	0.0	Power (W)	49.00
LAMPS QUANTITY	1	η down (%)	100.0	Power Factor (PF)	0.983
TEST VOLTAGE (V)	219.7	Effictive Flux(lm)	4261.7	EEI	0.157

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

Color Temperature Data List

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:

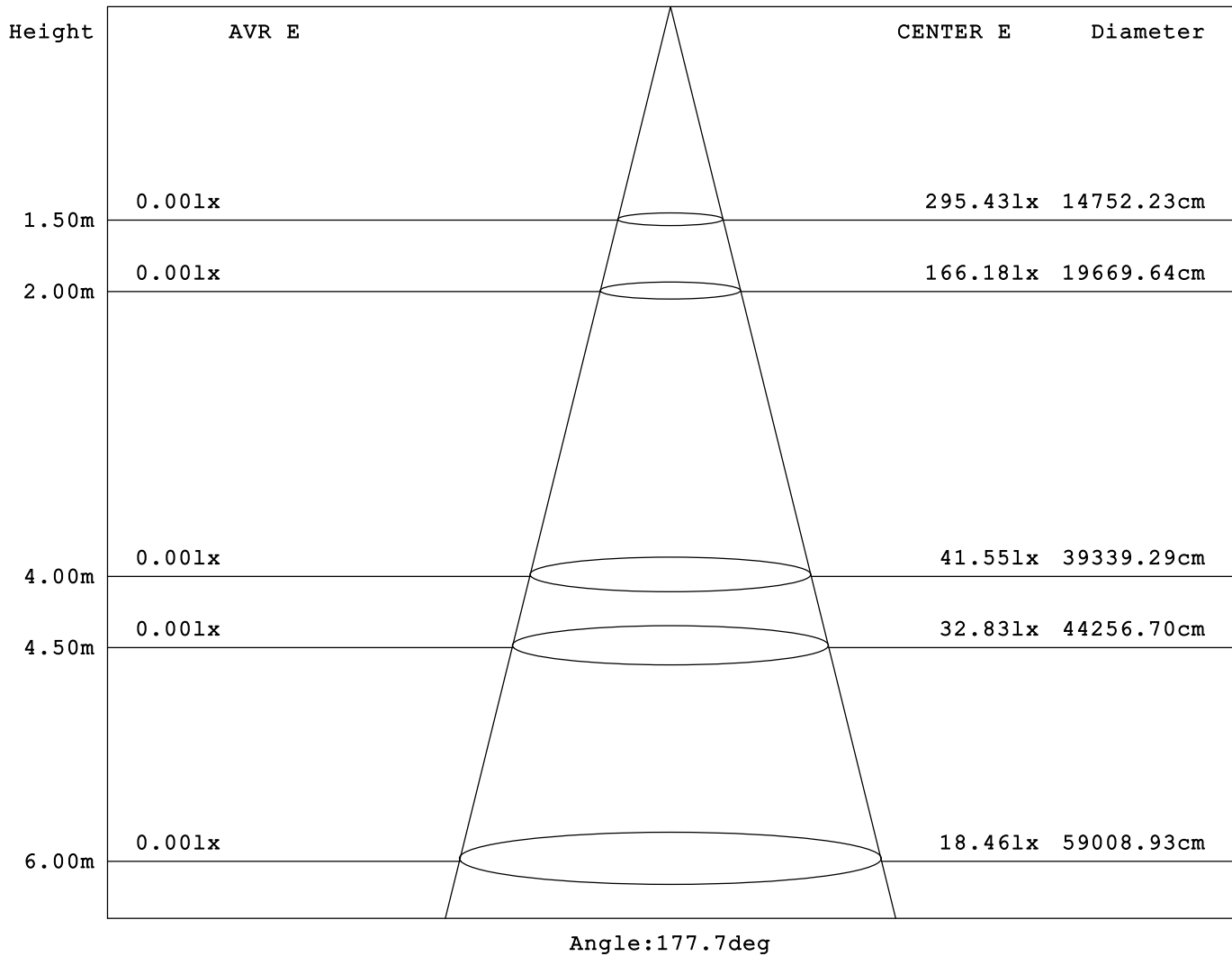
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 11.600 m
 Remarks: 5700K

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
10.0	692.4	688.8	686.1	689.5	687.0	683.4	683.5	687.9	0- 10	64.51	64.51
20.0	742.5	734.5	727.1	730.5	732.6	724.7	720.8	730.3	10- 20	201.3	265.9
30.0	788.6	775.3	761.8	766.1	774.2	761.4	754.0	766.9	20- 30	347.5	613.4
40.0	824.1	805.1	786.2	791.1	805.2	787.6	778.0	793.9	30- 40	491.9	1105
50.0	838.5	813.2	791.2	794.4	817.5	793.0	781.5	797.8	40- 50	620.3	1726
60.0	809.7	780.2	756.3	756.6	789.1	762.0	748.1	764.3	50- 60	707.5	2433
70.0	722.4	684.2	657.9	655.3	702.1	669.4	655.1	669.8	60- 70	718.7	3152
80.0	564.3	512.0	484.8	475.4	531.9	485.2	494.7	496.5	70- 80	616.0	3768
90.0	472.0	399.9	392.9	357.3	437.5	381.3	392.3	385.7	80- 90	493.8	4262
100.0									90-100		
110.0									100-110		
120.0									110-120		
130.0									120-130		
140.0									130-140		
150.0									140-150		
160.0									150-160		
170.0									160-170		
180.0									170-180		
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

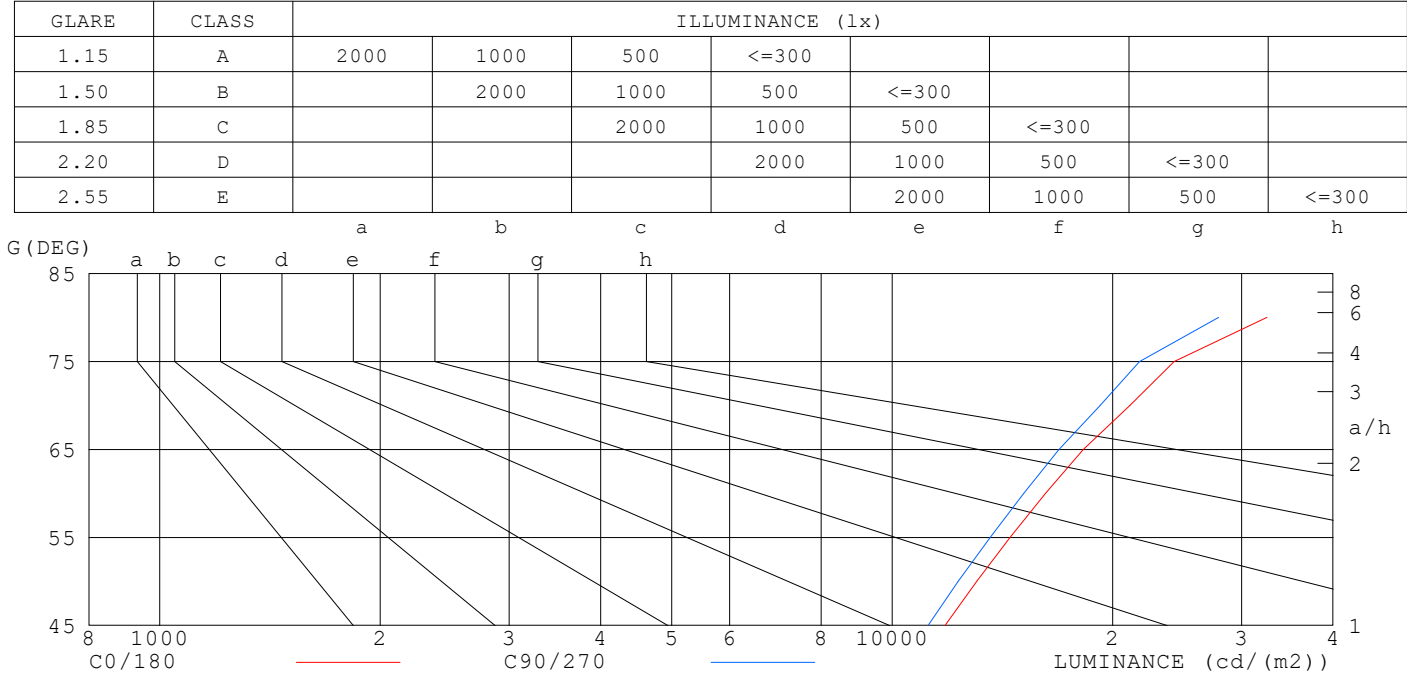
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/m2

G (DEG)	C0/180	C90/270
85	60753	51489
80	32499	27920
75	24274	21768
70	21123	19239
65	18235	16891
60	16196	15127
55	14489	13607
50	13046	12309
45	11812	11195

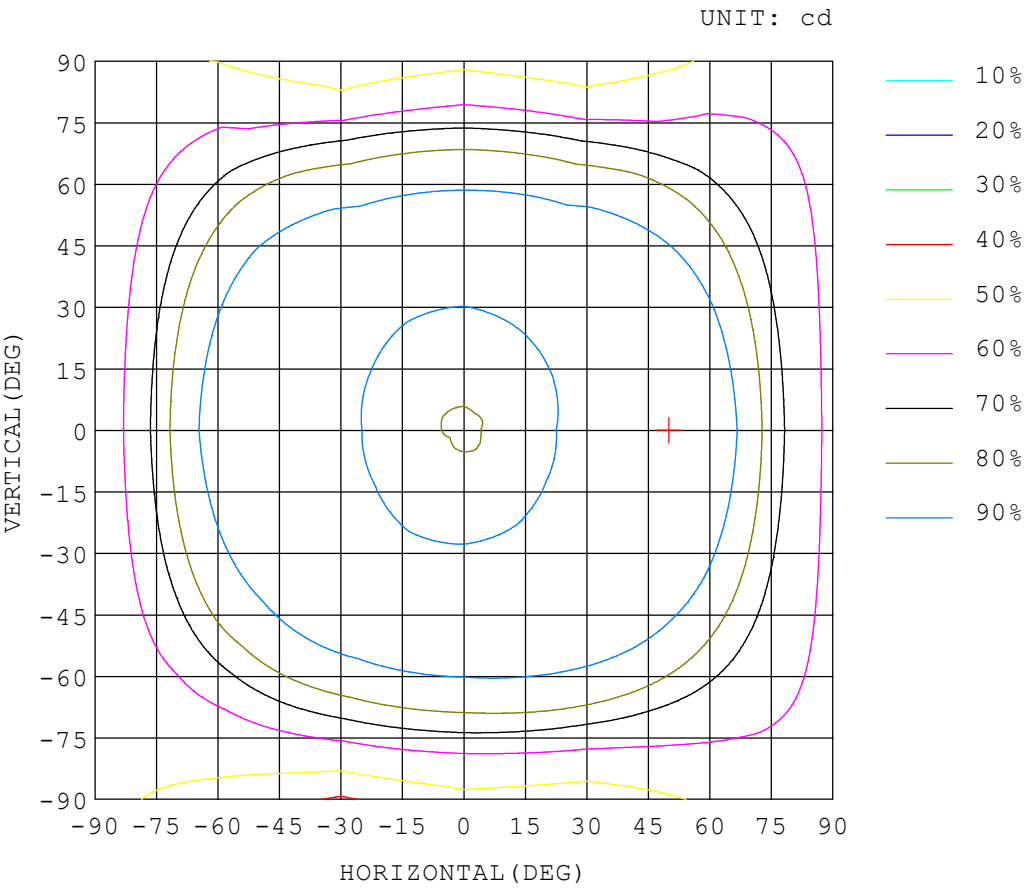
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:



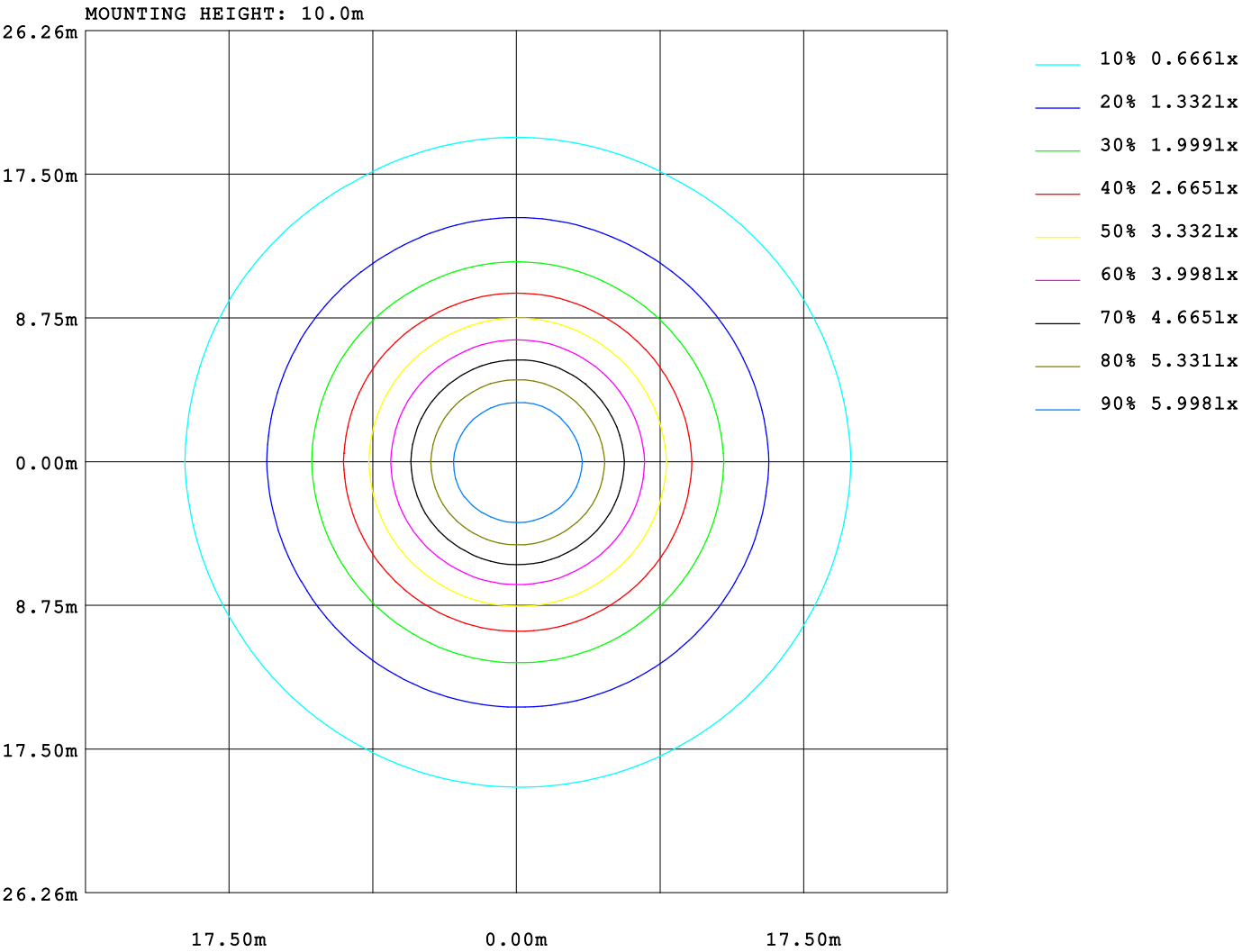
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

AREA LUMINOUS FLUX

Report number:

MANUFACTURER:																				
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019																				
NAME: FIRE FOX RING										TYPE: 5700K CRI-90					WEIGHT:					
SPECIFICATION:										DIMENSION: D-600 H-90 MM					SERIAL No.:					

90 80 70 60 50 40 30 <

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

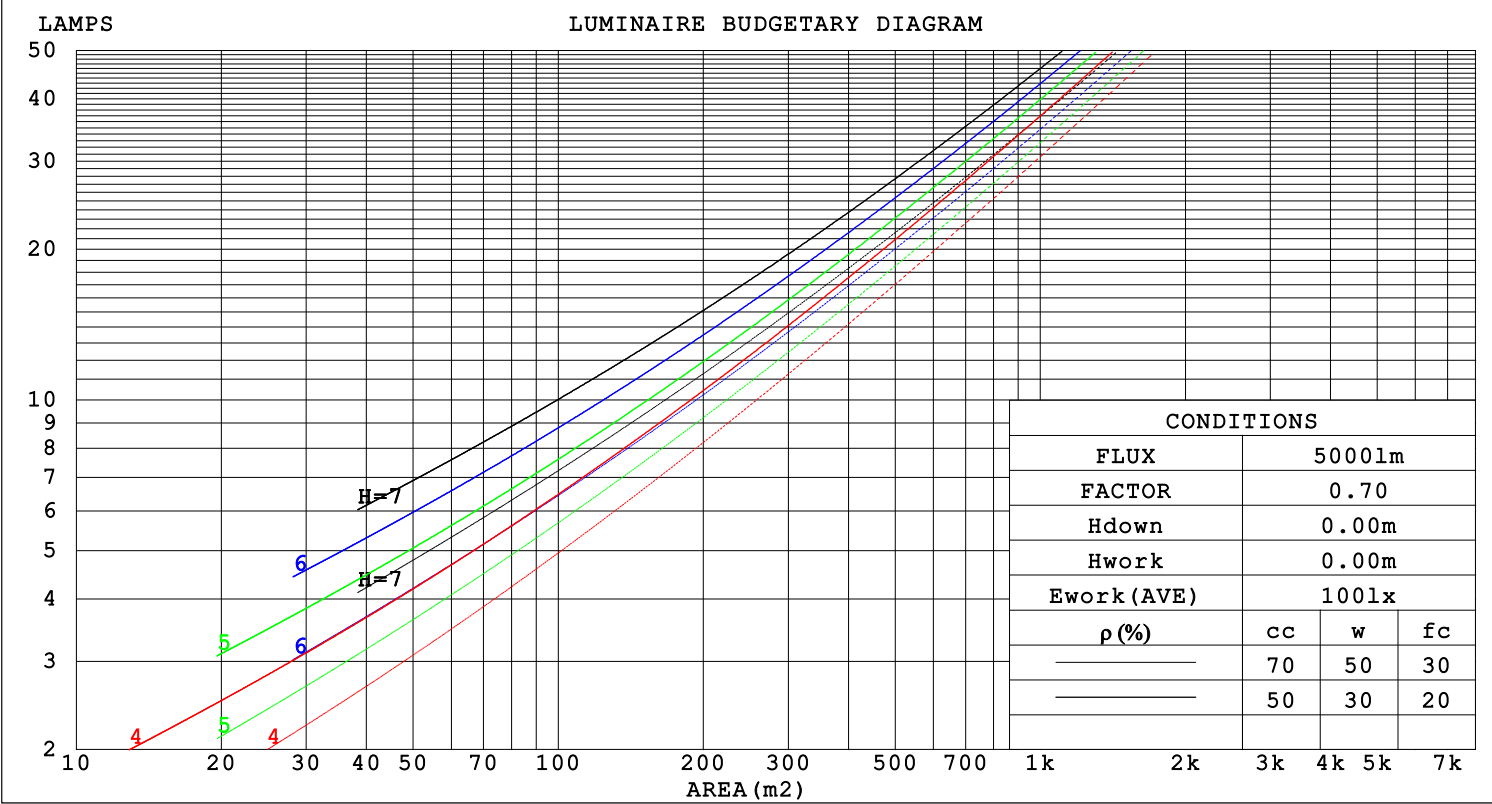
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019															
NAME: FIRE FOX RING								TYPE: 5700K CRI-90				WEIGHT:			
SPECIFICATION:								DIMENSION: D-600 H-90 MM				SERIAL No.:			

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pf _c	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	1.00
1.0	.96	.89	.83	.93	.87	.82	.89	.84	.79	.85	.81	.77	.81	.77	.74	.72
2.0	.80	.71	.63	.78	.69	.62	.74	.67	.61	.71	.64	.59	.67	.62	.58	.55
3.0	.68	.58	.49	.66	.57	.49	.63	.55	.48	.60	.53	.47	.57	.51	.46	.43
4.0	.59	.48	.40	.57	.47	.40	.55	.46	.39	.52	.45	.38	.50	.43	.38	.35
5.0	.52	.41	.33	.50	.40	.33	.48	.39	.32	.46	.38	.32	.44	.37	.32	.29
6.0	.46	.35	.28	.45	.35	.28	.43	.34	.28	.41	.33	.27	.39	.32	.27	.24
7.0	.41	.31	.24	.40	.31	.24	.39	.30	.24	.37	.29	.23	.36	.29	.23	.21
8.0	.37	.28	.21	.36	.27	.21	.35	.27	.21	.34	.26	.21	.32	.26	.20	.18
9.0	.34	.25	.19	.33	.24	.18	.32	.24	.18	.31	.23	.18	.30	.23	.18	.16
10.0	.31	.22	.17	.31	.22	.16	.29	.22	.16	.28	.21	.16	.27	.21	.16	.14



Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

WEC AND CCEC

Report number:

MANUFACTURER:															
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019															
NAME: FIRE FOX RING								TYPE: 5700K CRI-90				WEIGHT:			
SPECIFICATION:								DIMENSION: D-600 H-90 MM				SERIAL No.:			

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pf _c	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.466	.265	.084	.458	.261	.083	.444	.255	.081	.431	.249	.080	.419	.243	.078	
2.0	.393	.215	.066	.386	.213	.065	.373	.208	.064	.362	.203	.063	.351	.198	.063	
3.0	.342	.182	.055	.336	.180	.054	.325	.176	.054	.315	.173	.053	.305	.169	.052	
4.0	.304	.158	.046	.298	.156	.046	.289	.153	.046	.279	.150	.045	.271	.147	.045	
5.0	.273	.139	.040	.268	.138	.040	.259	.135	.040	.251	.133	.039	.243	.130	.039	
6.0	.248	.124	.036	.243	.123	.035	.236	.121	.035	.228	.119	.035	.221	.117	.035	
7.0	.227	.112	.032	.223	.111	.032	.216	.109	.031	.209	.107	.031	.203	.106	.031	
8.0	.209	.102	.029	.205	.101	.029	.199	.100	.028	.193	.098	.028	.188	.096	.028	
9.0	.193	.094	.026	.190	.093	.026	.185	.091	.026	.180	.090	.026	.175	.089	.026	
10.0	.180	.086	.024	.177	.086	.024	.172	.084	.024	.168	.083	.024	.163	.082	.024	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.191	.155	.122	.164	.133	.105	.112	.091	.073	.064	.053	.042	.021	.017	.014	
2.0	.186	.131	.086	.159	.113	.074	.109	.078	.052	.063	.046	.030	.020	.015	.010	
3.0	.178	.115	.064	.153	.099	.056	.105	.069	.039	.061	.040	.023	.019	.013	.008	
4.0	.170	.102	.050	.146	.088	.044	.100	.062	.031	.058	.036	.018	.019	.012	.006	
5.0	.162	.092	.041	.139	.080	.036	.096	.056	.025	.056	.033	.015	.018	.011	.005	
6.0	.154	.084	.034	.132	.073	.030	.091	.051	.021	.053	.030	.013	.017	.010	.004	
7.0	.146	.077	.029	.125	.067	.026	.087	.047	.018	.050	.028	.011	.016	.009	.004	
8.0	.138	.072	.026	.119	.062	.022	.082	.044	.016	.048	.026	.009	.016	.008	.003	
9.0	.131	.067	.023	.113	.058	.020	.078	.041	.014	.046	.024	.008	.015	.008	.003	
10.0	.125	.062	.021	.108	.054	.018	.075	.038	.013	.044	.023	.008	.014	.007	.003	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.600 m
 Remarks: 5700K

Uncorrected UGR Table

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	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	22.6	24.4	22.9	24.6	24.8	22.3	24.1	22.6	24.4	24.6
3H	25.4	27.1	25.7	27.4	27.6	25.0	26.7	25.4	27.0	27.3
4H	26.7	28.4	27.1	28.6	28.9	26.3	27.9	26.6	28.2	28.5
6H	28.2	29.8	28.6	30.1	30.4	27.6	29.1	28.0	29.4	29.7
8H	29.1	30.6	29.5	30.9	31.2	28.4	29.9	28.8	30.2	30.5
12H	30.1	31.6	30.5	31.9	32.2	29.3	30.8	29.7	31.1	31.4
4H 2H	23.6	25.2	23.9	25.5	25.7	23.4	25.0	23.7	25.3	25.6
3H	26.5	27.9	26.8	28.3	28.6	26.2	27.6	26.6	28.0	28.3
4H	27.9	29.3	28.3	29.6	30.0	27.6	28.9	27.9	29.3	29.6
6H	29.6	30.9	30.0	31.2	31.6	29.1	30.3	29.5	30.7	31.0
8H	30.6	31.8	31.0	32.2	32.6	30.0	31.1	30.4	31.5	31.9
12H	31.7	32.8	32.2	33.2	33.6	31.0	32.1	31.4	32.4	32.9
8H 4H	28.5	29.7	28.9	30.0	30.4	28.2	29.3	28.6	29.7	30.1
6H	30.5	31.5	30.9	31.9	32.3	30.0	31.0	30.4	31.4	31.8
8H	31.7	32.6	32.1	33.0	33.5	31.1	32.0	31.5	32.4	32.9
12H	33.0	33.8	33.5	34.3	34.7	32.3	33.1	32.8	33.5	34.0
12H 4H	28.6	29.7	29.1	30.1	30.5	28.3	29.4	28.8	29.8	30.2
6H	30.7	31.6	31.2	32.0	32.5	30.3	31.2	30.7	31.6	32.1
8H	32.0	32.8	32.5	33.3	33.8	31.5	32.3	32.0	32.7	33.2

Variations with the observer position at spacings:

S = 1.0H	+ 0.1 / - 0.1	+ 0.1 / - 0.1
1.5H	+ 0.2 / - 0.3	+ 0.2 / - 0.3
2.0H	+ 0.3 / - 0.4	+ 0.3 / - 0.4

CIE Pub.117 Corrected 4262 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.0)

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	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	47	34	26	47	34	26	45	33	26	18
0.80	57	43	34	55	42	34	53	41	33	25
1.00	65	51	42	63	50	41	61	52	41	32
1.25	72	58	49	70	58	49	67	56	48	39
1.50	77	64	55	75	63	54	72	61	53	44
2.00	85	73	64	83	72	64	79	70	62	52
2.50	90	79	71	88	78	70	83	75	68	58
3.00	94	84	76	92	83	75	87	79	73	63
4.00	99	91	84	97	89	82	92	85	80	69
5.00	102	95	89	100	93	87	95	89	84	74
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

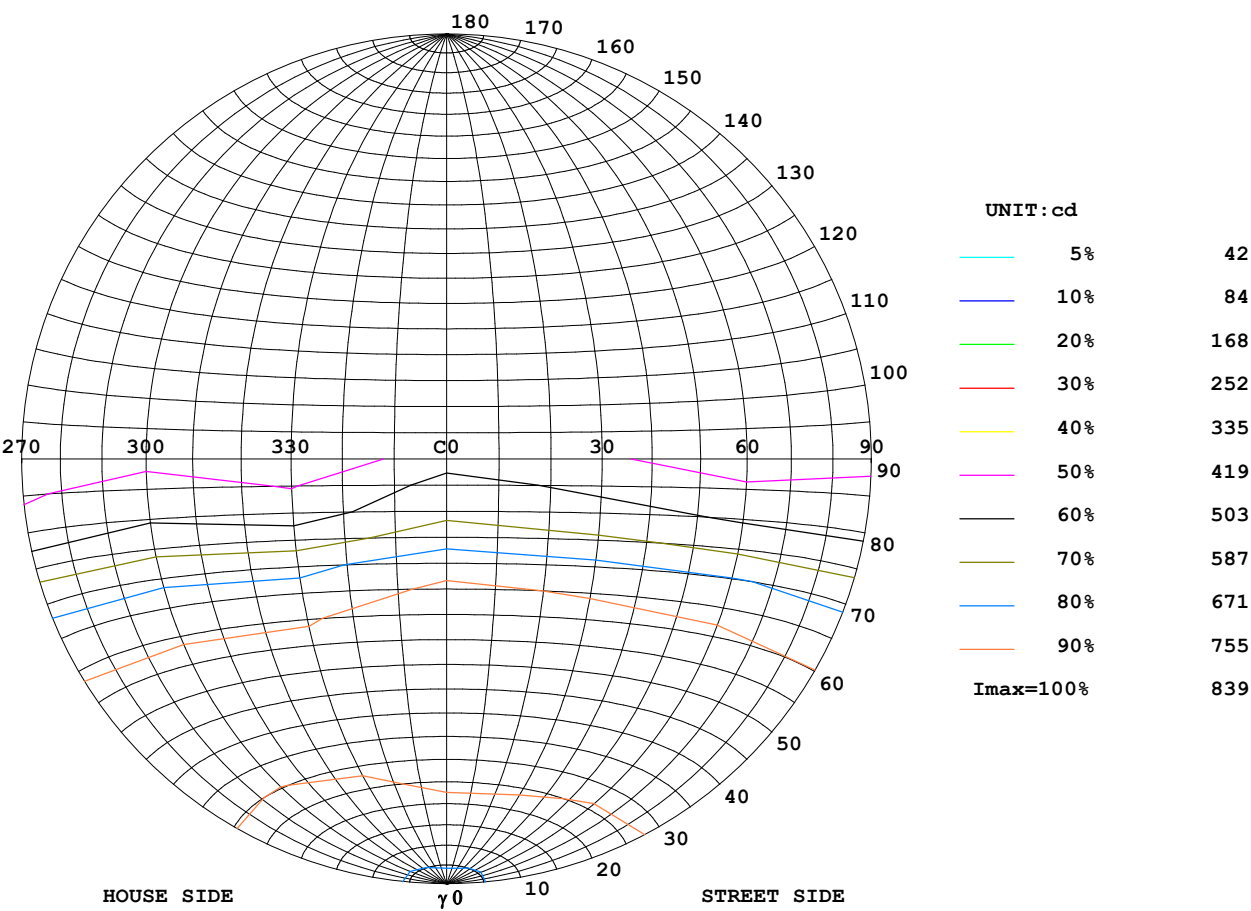
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.600 m
 Remarks: 5700K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:



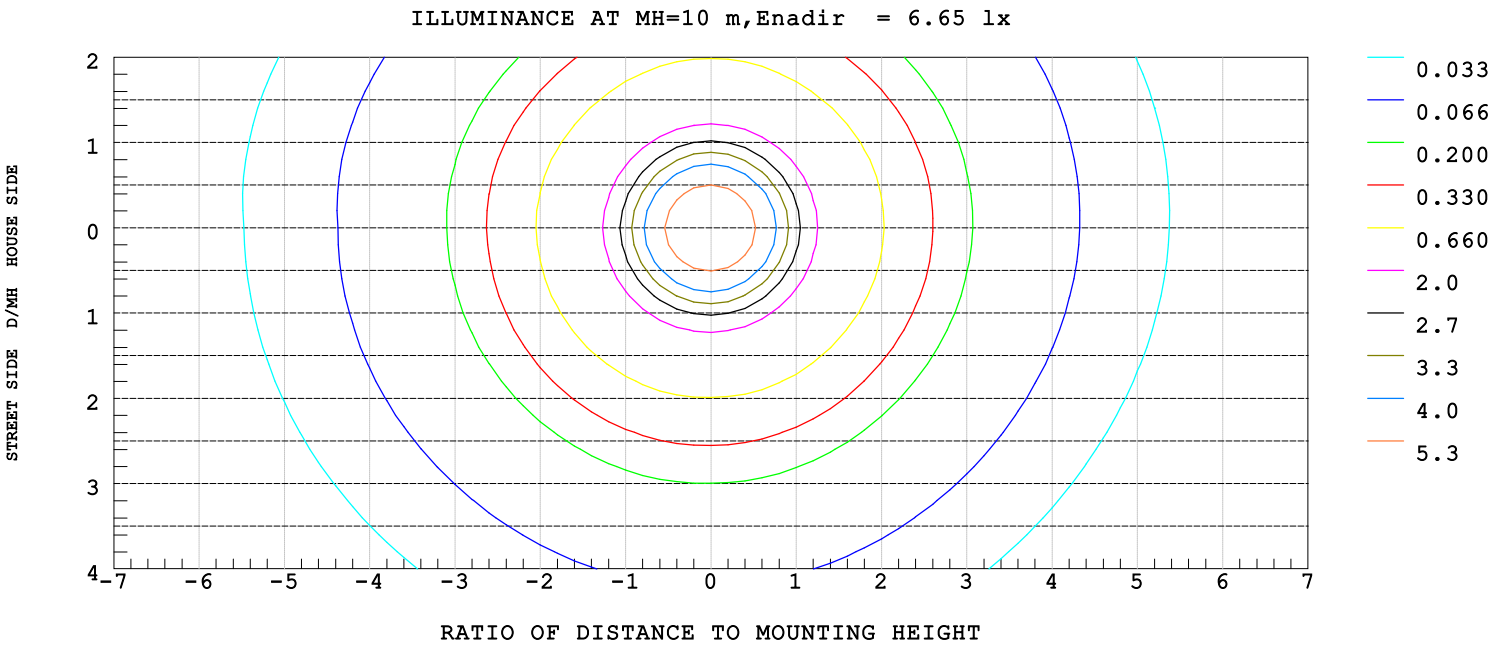
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:



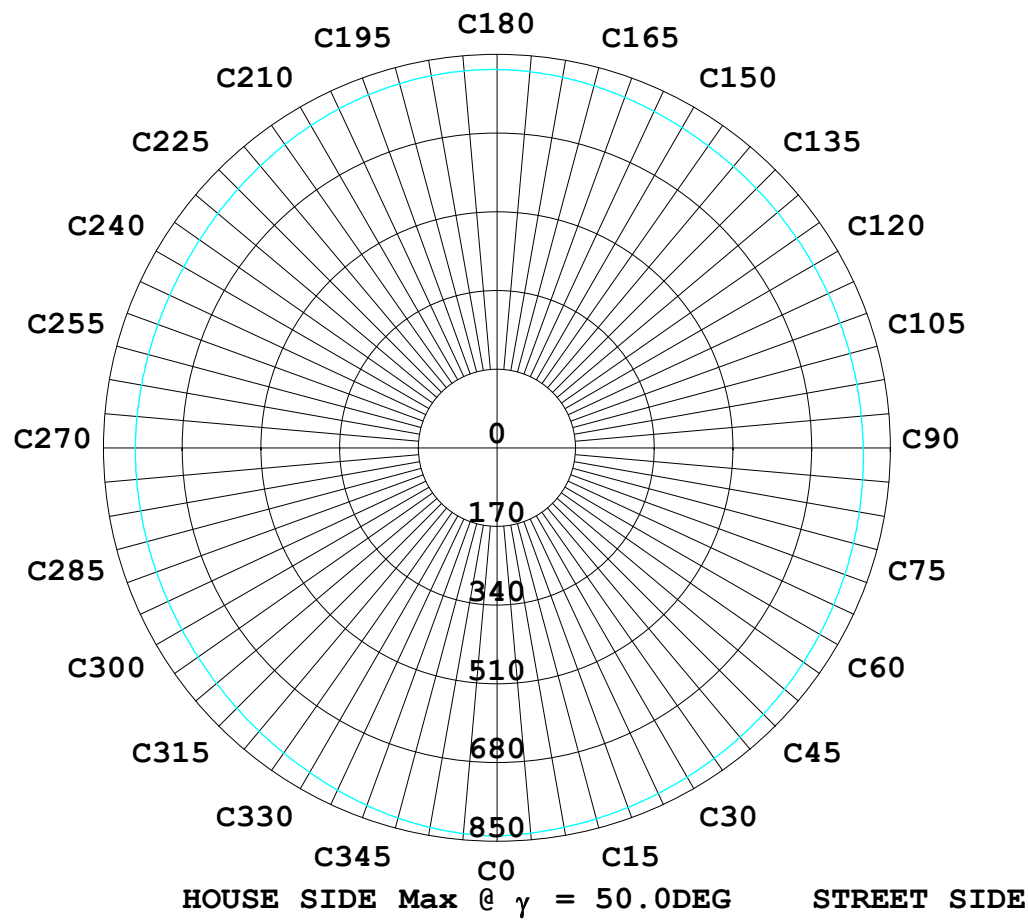
Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: FIRE FOX RING	TYPE: 5700K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-600 H-90 MM	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330
0.0	665	664	664	664	665	665	665	664	664	664	665	665
5.0	672	671	669	670	671	673	670	667	668	668	671	670
10.0	692	692	686	686	688	691	687	684	683	684	688	688
15.0	717	716	707	707	707	713	710	705	702	702	707	710
20.0	743	739	730	727	727	734	733	727	722	721	728	733
25.0	767	762	750	746	746	754	755	749	740	739	746	754
30.0	789	782	768	762	761	771	774	767	756	754	761	773
35.0	807	799	784	775	775	785	791	783	769	768	775	788
40.0	824	813	797	786	785	797	805	795	780	778	785	803
45.0	835	821	805	792	791	802	815	804	784	783	790	810
50.0	839	821	805	791	790	799	818	804	782	782	786	810
55.0	831	812	796	780	778	787	810	796	771	770	773	801
60.0	810	789	772	756	752	761	789	777	747	748	748	781
65.0	771	746	729	714	707	717	752	739	702	707	703	740
70.0	722	695	673	658	649	661	702	690	649	655	647	692
75.0	628	600	570	563	542	560	610	600	550	563	546	601
80.0	564	530	494	485	469	482	532	517	454	495	463	530
85.0	529	485	435	449	407	446	485	478	409	457	414	492
90.0	472	431	369	393	326	389	438	418	345	392	341	431

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:06-20-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.600 m
Remarks: 5700K