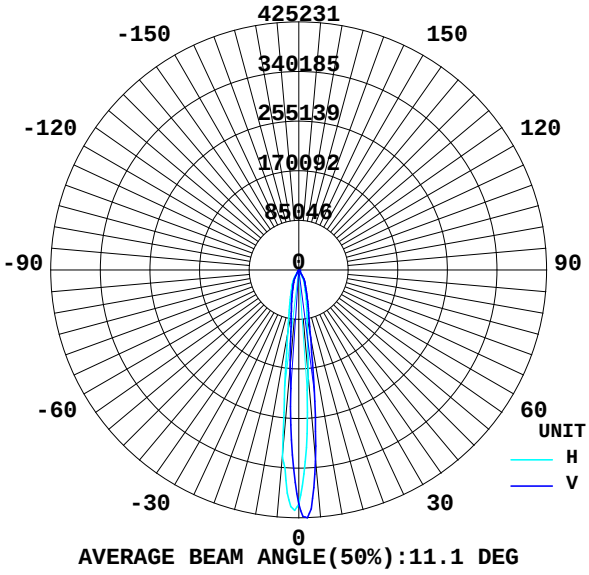
LUMINAIRE PHOTOMETRIC TEST REPORT

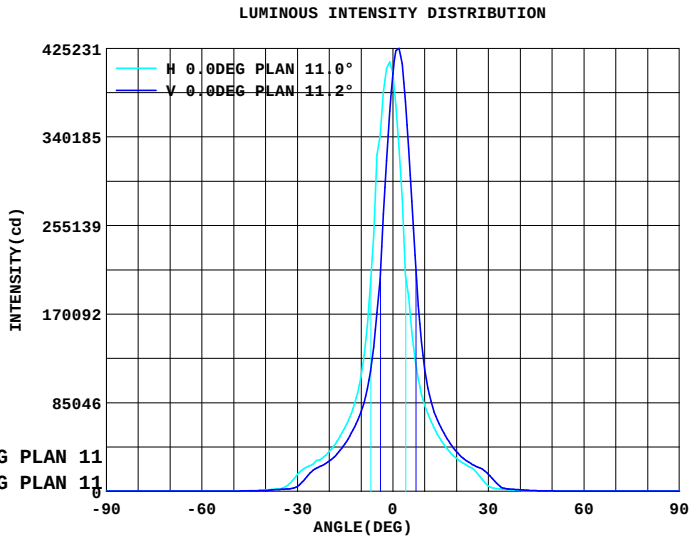
Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

MODEL:					
NOMINAL POWER(W):	500	Imax(cd):	425665	Voltage(V)	220.1
RATED VOLTAGE(V):	220	AVAILABILITY(%):	100.0	Current(A)	2.278
NOMINAL FLUX(lm):	46427	Avai. FLUX(lm):	46427	Power(W)	495.2
TEST FLUX(lm):	46427	EFFICIENCY(%):	100.0	Power Factor(PF)	0.988
LAMPS QUANTITY :	1	TOTAL FLUX(lm):	46427	EFFICIENCY(lm/W)	93.7
Effictive Flux(lm) :	46427.3	θ @50%(H, V):	12.3,10.9DEG	EEI:	0.145



AVERAGE BEAM ANGLE(50%):11.1 DEG



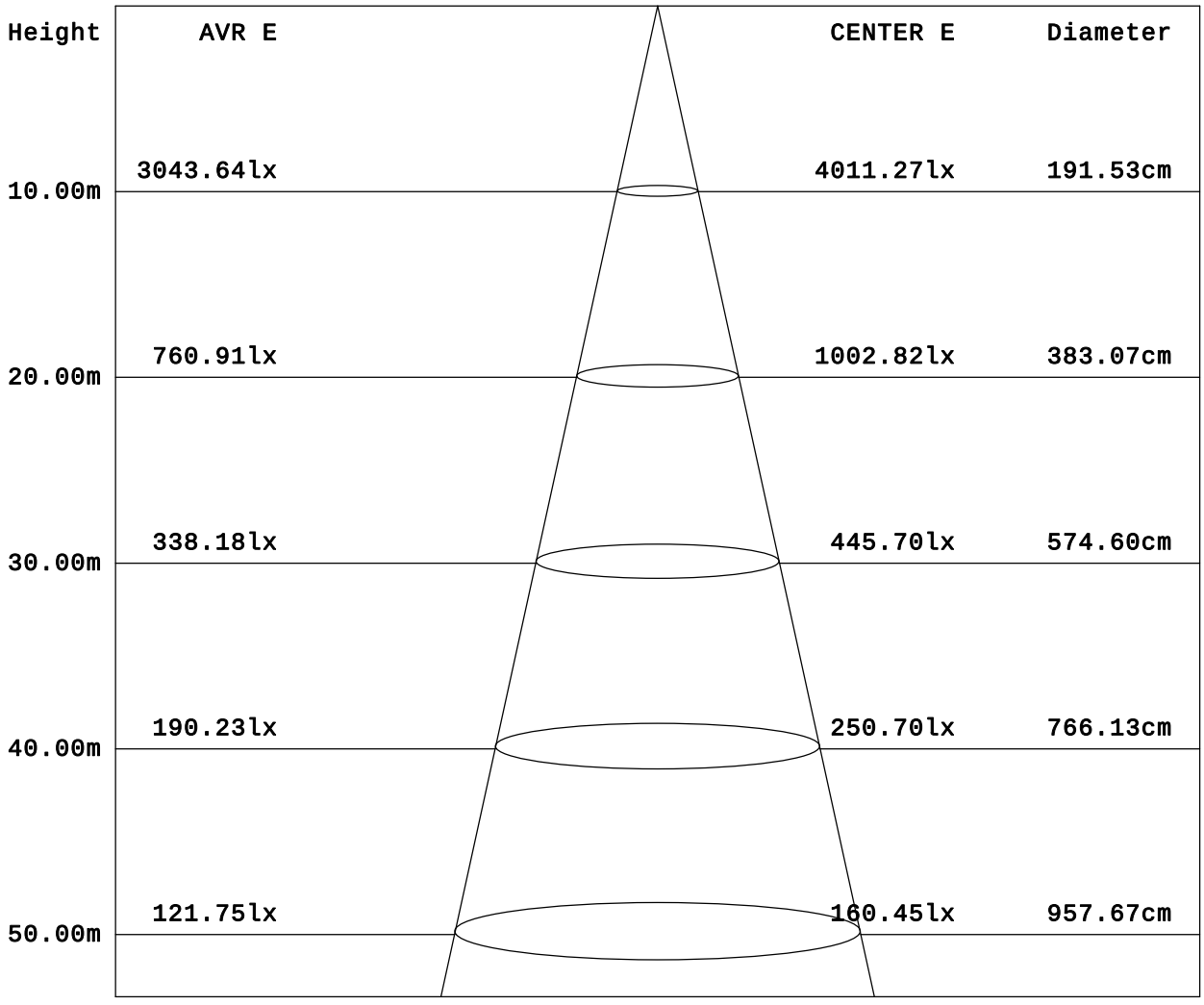
Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



Angle:10.9deg

Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

AREA LUMINOUS FLUX

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

AREA FLUX DIAGRAM — UNIT:lm

VERTICAL(DEG)	-27	-24	-21	-18	-15	-12	-9	-6	HORIZONTAL(DEG) 6	9	12	15	18	21	24	27	Φ t	Φ a
27	7.75	15.7	30.6	45.4	55.2	61.3	64.9	67.7	68.5	67.9	65.6	62.1	57.0	48.3	35.2	19.4	8.89	5.41	788	788
24	15.3	32.6	49.1	59.2	66.3	73.2	79.6	84.0	85.3	84.1	80.3	75.0	67.3	61.0	52.7	37.8	19.6	8.21	1032	1032
21	29.1	47.9	59.6	68.7	78.6	88.5	98.3	106	110	108	102	92.1	82.4	71.5	62.2	52.4	34.7	15.5	1309	1309
18	42.1	57.1	67.4	79.5	93.4	110	126	139	146	144	133	118	101	84.9	71.5	60.4	47.8	26.4	1648	1648
15	51.2	62.9	76.0	92.0	113	138	163	185	198	195	176	151	125	102	82.3	67.3	55.4	37.4	2072	2072
12	56.3	68.5	84.4	107	136	172	213	262	300	291	245	196	155	121	93.7	74.4	59.5	45.3	2679	2679
9	59.0	73.7	92.8	121	160	211	295	431	544	514	383	259	186	139	105	80.6	63.4	50.1	3766	3766
	61.6	77.8	99.5	133	179	252	410	695	935	890	598	338	215	153	113	84.4	65.9	52.5	5352	5352
	62.7	79.3	103	139	190	279	493	877	1123	1080	734	382	228	159	116	86.3	67.0	52.2	6251	6251
	57.7	71.5	91.1	120	163	227	364	640	920	818	504	301	206	151	111	84.5	66.7	49.4	4947	4947
	52.6	64.8	82.8	109	145	194	273	409	522	486	352	248	184	139	105	81.0	64.1	46.0	3558	3558
-9	49.2	61.4	76.9	98.1	127	163	205	255	293	284	241	196	157	122	94.9	75.4	60.3	39.2	2597	2597
-12	43.5	57.0	69.5	85.6	107	132	158	182	197	195	178	153	127	104	83.7	68.3	53.6	30.0	2022	2022
-15	33.2	51.1	61.6	74.0	87.9	105	121	136	145	144	134	119	102	86.3	73.1	60.1	42.5	19.2	1594	1594
-18	20.6	40.1	54.4	63.0	73.1	83.6	93.9	103	108	107	102	92.7	82.6	72.3	62.3	48.7	27.0	10.9	1245	1245
-21	10.4	24.3	41.7	54.3	61.7	68.5	75.2	80.2	83.1	82.9	79.8	74.7	68.1	60.7	48.8	30.2	13.7	7.11	966	966
-24	5.74	10.4	22.7	37.7	49.7	57.2	61.9	65.0	66.7	66.6	64.8	61.1	54.5	42.9	27.3	13.6	7.15	5.26	721	721
-27	4.54	5.68	8.82	16.6	27.4	37.3	44.8	49.5	51.1	50.3	47.1	40.2	30.4	19.6	10.7	6.87	5.29	4.08	461	461
Φ t	663	903	1173	1504	1913	2450	3340	4766	5895	5606	4220	2958	2228	1739	1348	1033	763	505	46427	
Φ a	663	903	1173	1504	1913	2450	3340	4766	5895	5606	4220	2958	2228	1739	1348	1033	763	505		46427

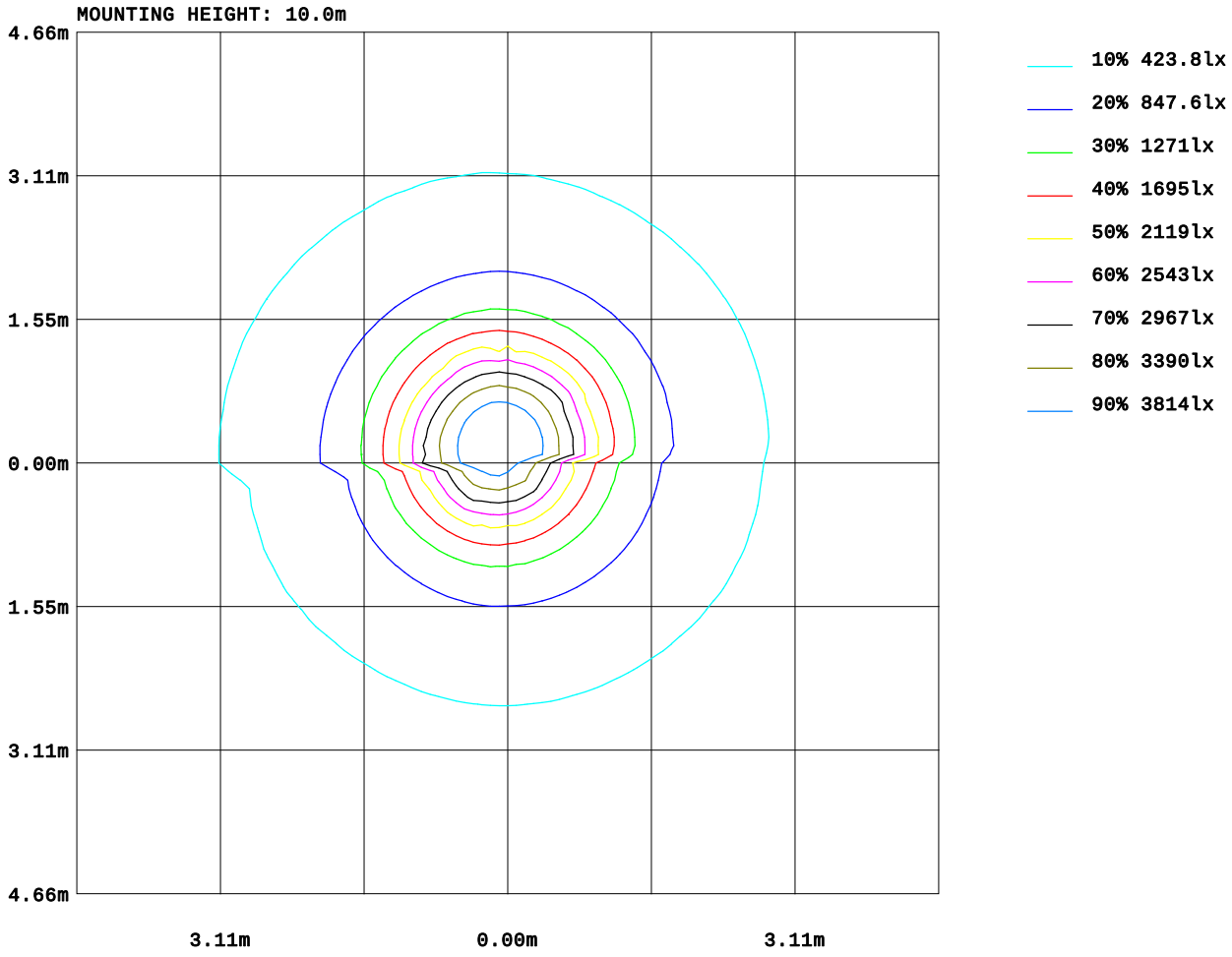
Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



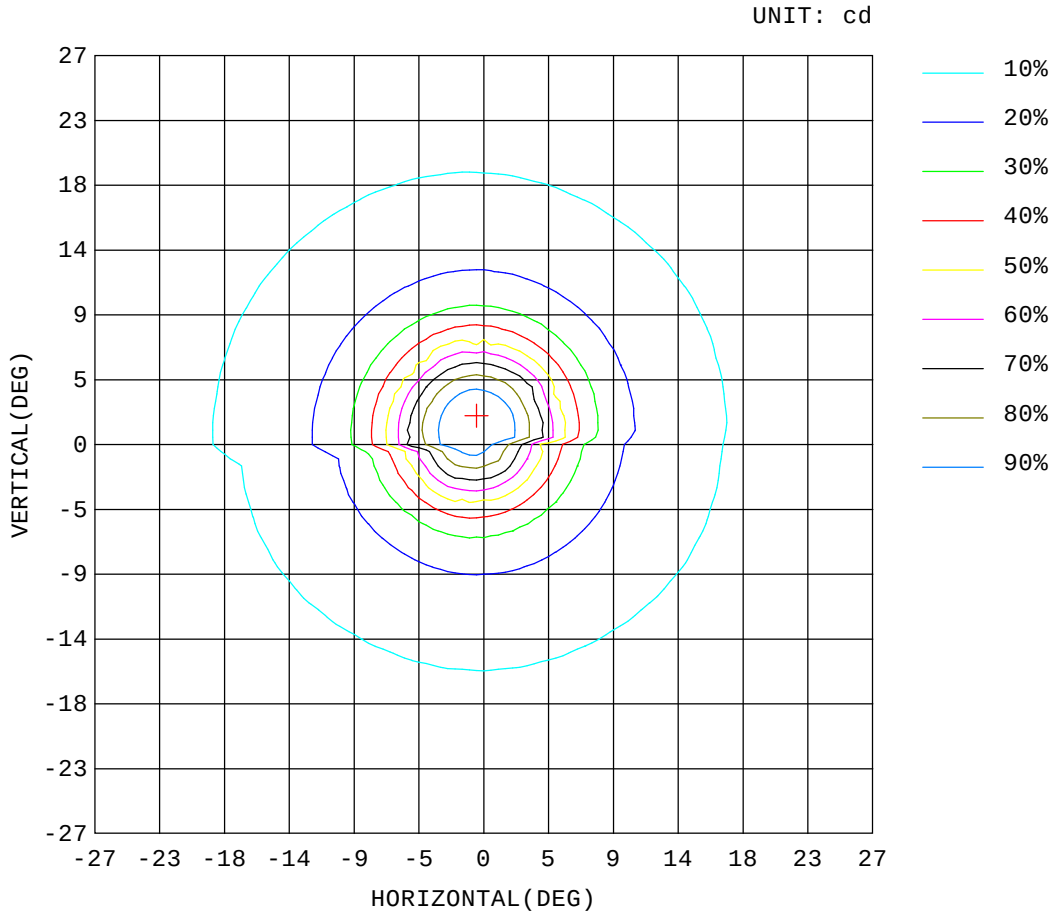
Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:	**Address:**	
NAME: TS-500	**TYPE:**	**WEIGHT:**
SPECIFICATION:	**DIMENSION:**	**SERIAL No.:**



Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

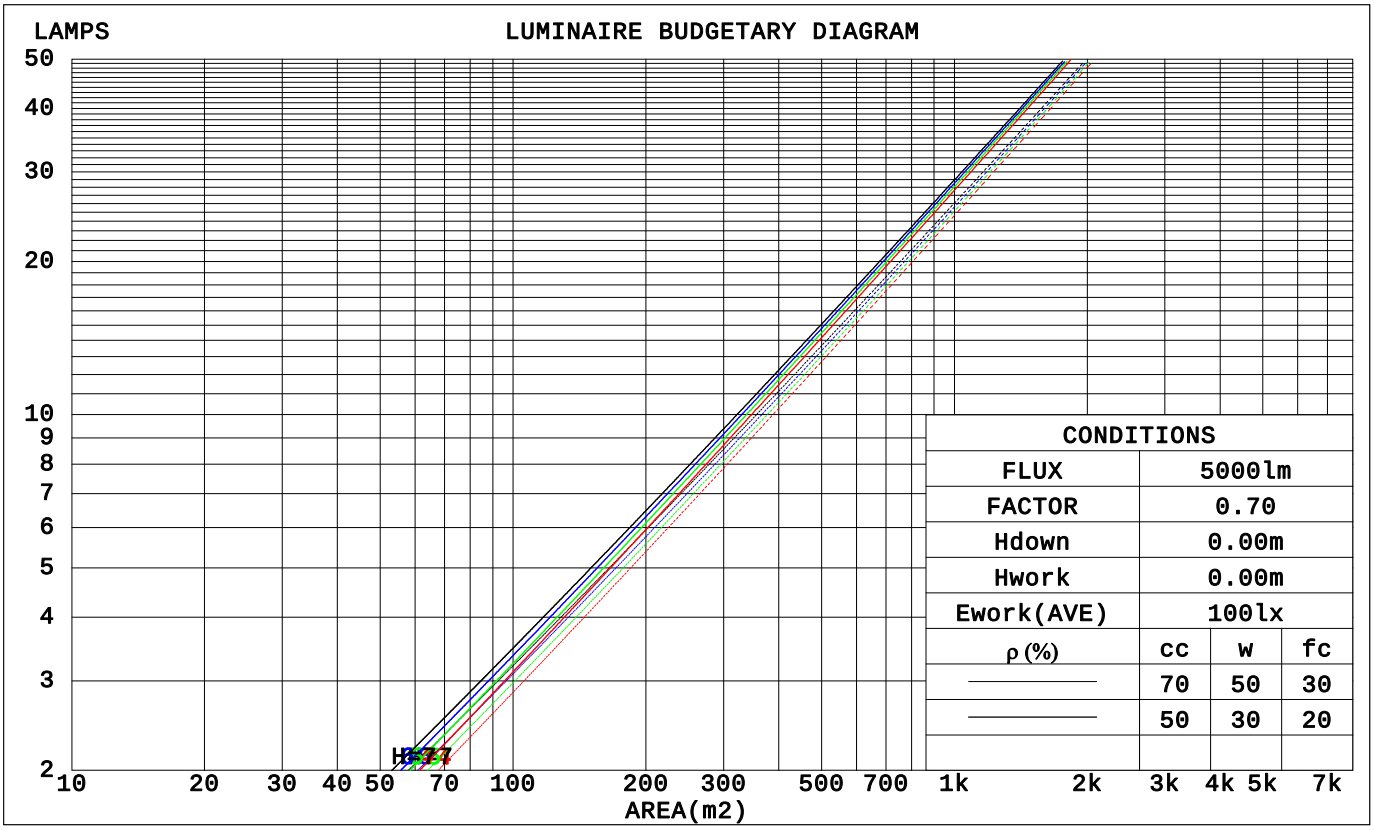
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.13	1.11	1.09	1.11	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.00	.99	.98	.96
2.0	1.07	1.04	1.02	1.06	1.03	1.01	1.03	1.00	.98	.00	.98	.96	.97	.96	.94	.93
3.0	1.03	.99	.96	1.01	.98	.95	.99	.96	.94	.97	.94	.92	.94	.93	.91	.90
4.0	.99	.94	.91	.97	.94	.91	.95	.92	.90	.94	.91	.89	.92	.90	.88	.87
5.0	.95	.91	.88	.94	.90	.87	.92	.89	.86	.91	.88	.86	.89	.87	.85	.84
6.0	.91	.87	.84	.91	.87	.84	.89	.86	.83	.88	.85	.83	.87	.84	.82	.81
7.0	.88	.84	.81	.88	.84	.81	.87	.83	.81	.86	.83	.80	.85	.82	.80	.79
8.0	.86	.82	.79	.85	.81	.78	.84	.81	.78	.83	.80	.78	.83	.80	.78	.77
9.0	.83	.79	.76	.83	.79	.76	.82	.78	.76	.81	.78	.76	.81	.78	.75	.75
10.0	.81	.77	.74	.80	.77	.74	.80	.76	.74	.79	.76	.74	.79	.76	.74	.73



Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	1871	1672	1715	1998	3232	3314	3289	2899	0- 5	7603	7603
10.0	828.3	758.3	759.5	793.8	1097	1188	1173	1036	5- 10	10605	18208
15.0	495.0	458.9	455.3	474.6	613.1	624.8	617.8	564.8	10- 15	8242	26450
20.0	317.0	299.1	290.1	301.5	382.6	386.7	382.9	348.4	15- 20	6920	33370
25.0	223.0	199.4	205.2	214.5	262.2	263.6	257.7	237.1	20- 25	5822	39192
30.0	51.63	38.22	43.93	69.87	160.2	178.6	165.3	127.0	25- 30	4304	43497
35.0	19.83	17.07	19.18	18.99	25.91	31.26	27.81	22.03	30- 35	1540	45036
40.0	9.068	8.035	8.313	9.162	14.03	16.22	15.10	12.65	35- 40	551.4	45588
45.0	4.578	4.007	4.166	4.414	6.459	6.867	6.370	5.728	40- 45	292.9	45881
50.0	2.783	2.465	2.488	2.439	3.144	3.399	3.140	3.064	45- 50	155.8	46037
55.0	2.085	1.860	1.834	1.754	2.044	2.163	2.022	2.095	50- 55	101.9	46138
60.0	1.625	1.476	1.505	1.432	1.586	1.664	1.574	1.661	55- 60	80.62	46219
65.0	1.306	1.169	1.230	1.178	1.326	1.388	1.334	1.387	60- 65	68.98	46288
70.0	0.931	0.790	0.853	0.853	1.047	1.134	1.072	1.096	65- 70	57.43	46346
75.0	0.555	0.447	0.498	0.507	0.688	0.772	0.710	0.689	70- 75	40.79	46386
80.0	0.302	0.219	0.260	0.256	0.388	0.466	0.403	0.393	75- 80	24.73	46411
85.0	0.117	0.060	0.088	0.078	0.163	0.225	0.183	0.183	80- 85	12.45	46423
90.0	0.020	0	0.017	0	0.024	0.050	0.031	0.036	85- 90	3.799	46427
95.0									90- 95		
100.0									95-100		
105.0									100-105		
110.0									105-110		
115.0									110-115		
120.0									115-120		
125.0									120-125		
130.0									125-130		
135.0									130-135		
140.0									135-140		
145.0									140-145		
150.0									145-150		
155.0									150-155		
160.0									155-160		
165.0									160-165		
170.0									165-170		
175.0									170-175		
180.0									175-180		
DEG	LUMINOUS INTENSITY:×100cd									UNIT:lm	

Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

WEC AND CCEC

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.139	.079	.025	.133	.076	.024	.120	.069	.022	.109	.063	.020	.098	.057	.018	
2.0	.129	.071	.022	.124	.068	.021	.114	.063	.020	.104	.059	.018	.096	.054	.017	
3.0	.121	.064	.019	.116	.062	.019	.108	.058	.018	.100	.055	.017	.092	.051	.016	
4.0	.113	.059	.017	.109	.057	.017	.102	.054	.016	.095	.051	.015	.089	.048	.015	
5.0	.107	.054	.016	.103	.053	.015	.097	.051	.015	.091	.048	.014	.086	.046	.014	
6.0	.101	.051	.014	.098	.050	.014	.093	.048	.014	.088	.046	.013	.083	.044	.013	
7.0	.096	.047	.013	.093	.046	.013	.089	.045	.013	.084	.043	.013	.080	.042	.012	
8.0	.091	.045	.013	.089	.044	.012	.085	.042	.012	.081	.041	.012	.078	.040	.012	
9.0	.087	.042	.012	.085	.042	.012	.082	.040	.011	.078	.039	.011	.075	.038	.011	
10.0	.083	.040	.011	.082	.039	.011	.078	.038	.011	.075	.037	.011	.073	.037	.010	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.118	.129	.114	.102	.088	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.136	.113	.095	.116	.098	.083	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.123	.098	.079	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.113	.086	.066	.097	.074	.057	.067	.052	.040	.039	.030	.024	.012	.010	.008	
6.0	.104	.076	.055	.089	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.096	.068	.047	.083	.059	.041	.057	.041	.029	.033	.024	.017	.011	.008	.006	
8.0	.090	.061	.041	.077	.053	.036	.054	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.084	.055	.035	.073	.048	.031	.050	.034	.022	.029	.020	.013	.009	.007	.004	
10.0	.079	.050	.031	.068	.044	.027	.047	.031	.019	.028	.018	.012	.009	.006	.004	

Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

Uncorrected UGR Table

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	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	8.4	9.0	8.6	9.2	9.3	7.8	8.4	8.0	8.6	8.7
3H	8.7	9.3	9.0	9.5	9.7	8.1	8.7	8.4	8.9	9.1
4H	8.8	9.4	9.1	9.6	9.8	8.2	8.8	8.5	9.0	9.2
6H	8.9	9.4	9.1	9.7	9.9	8.3	8.8	8.5	9.0	9.3
8H	8.9	9.4	9.1	9.6	9.9	8.2	8.8	8.5	9.0	9.3
12H	8.8	9.4	9.1	9.6	9.9	8.2	8.7	8.5	9.0	9.3
4H 2H	8.4	9.0	8.7	9.2	9.4	7.8	8.4	8.1	8.6	8.8
3H	8.9	9.4	9.2	9.6	9.9	8.3	8.8	8.6	9.1	9.4
4H	9.0	9.5	9.3	9.8	10.1	8.5	8.9	8.8	9.2	9.5
6H	9.1	9.5	9.5	9.8	10.2	8.5	9.0	8.9	9.3	9.6
8H	9.1	9.5	9.5	9.8	10.2	8.5	8.9	8.9	9.3	9.6
12H	9.1	9.4	9.5	9.8	10.2	8.5	8.9	8.9	9.2	9.6
8H 4H	9.0	9.4	9.4	9.7	10.1	8.5	8.8	8.8	9.2	9.6
6H	9.1	9.4	9.5	9.8	10.2	8.6	8.9	9.0	9.3	9.7
8H	9.1	9.4	9.5	9.8	10.2	8.6	8.9	9.0	9.3	9.7
12H	9.1	9.3	9.6	9.8	10.3	8.5	8.8	9.0	9.2	9.7
12H 4H	8.9	9.3	9.3	9.7	10.0	8.4	8.8	8.8	9.1	9.5
6H	9.0	9.3	9.5	9.7	10.2	8.5	8.8	9.0	9.2	9.7
8H	9.1	9.3	9.5	9.8	10.2	8.5	8.8	9.0	9.2	9.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.1 / - 1.8					+ 2.5 / - 2.0				
1.5H	+ 3.8 / - 1.7					+ 4.3 / - 1.8				
2.0H	+ 2.0 / - 0.8					+ 1.8 / - 0.6				

CIE Pub.117 Corrected 46427 lm Total Lamp Luminous Flux.(8log(F/F0) = 13.3)

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	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) x RCR = 5									
k = 0.60	90	85	81	90	85	81	89	84	81	78
0.80	97	92	89	97	92	89	96	91	88	85
1.00	101	96	93	100	96	93	99	95	92	88
1.25	105	100	97	104	100	97	102	98	96	92
1.50	107	103	100	106	102	100	104	101	98	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	114	112	113	112	110	110	108	107	100
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004	Suspended								SHRNOM = 1.25	

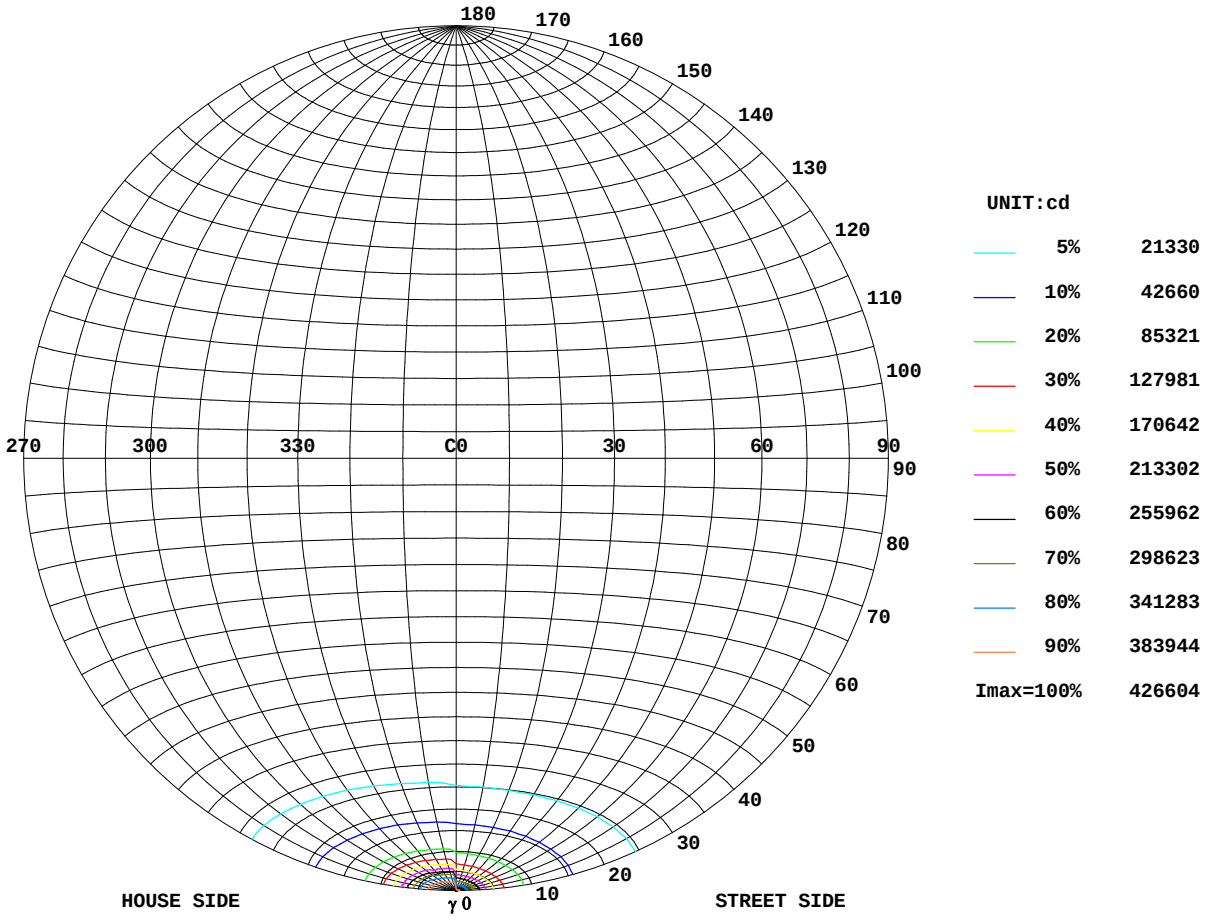
Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



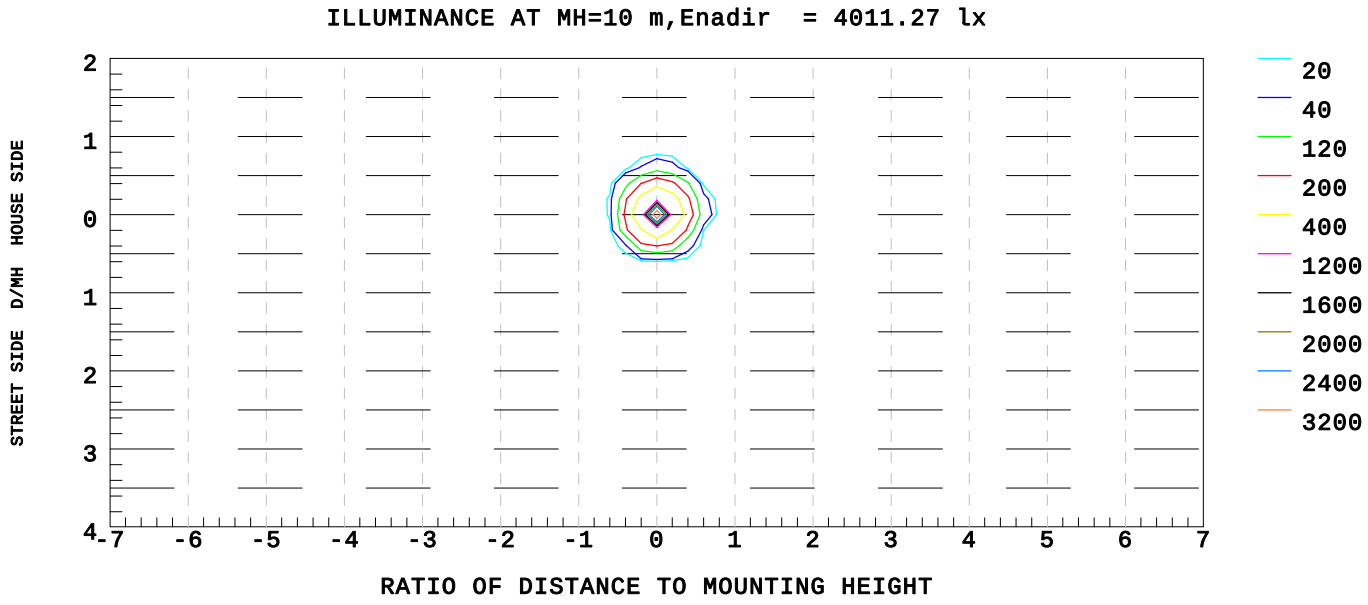
Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

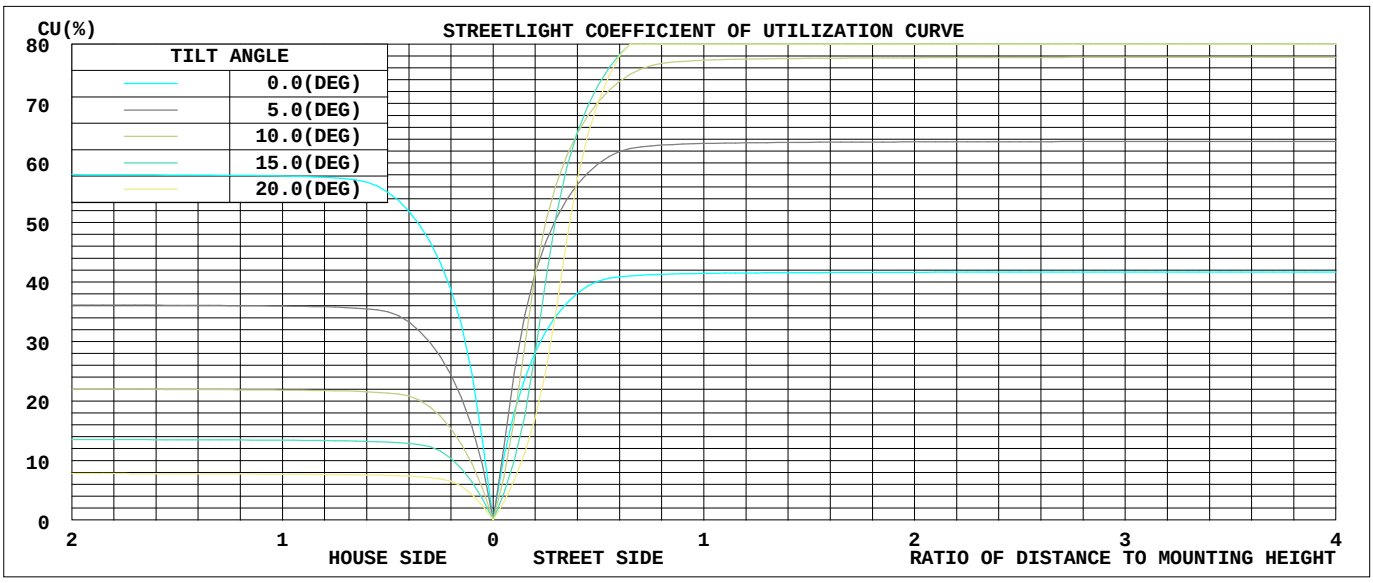
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

ISOLUX DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:





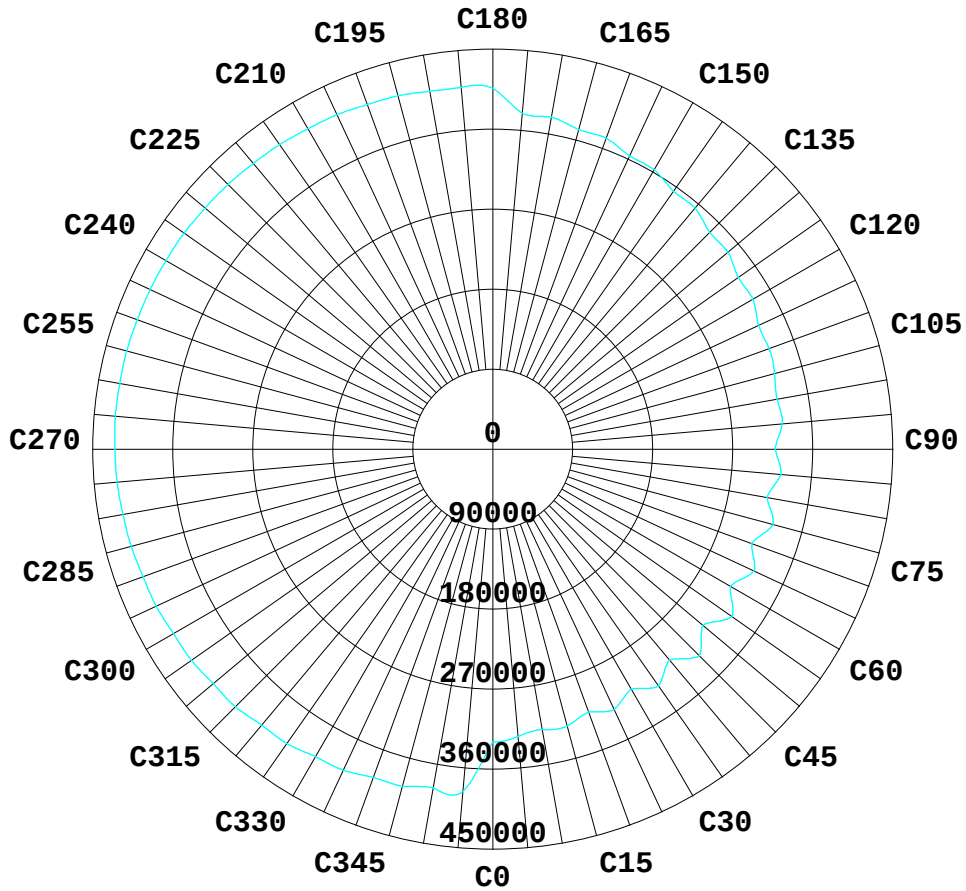
Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:	Address:	
NAME: TS-500	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



Test System:HOPOO HPG1900
Temperature:25.3DEG
Operators:
Test Date:2017-8-17

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.600 m
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	**Address:**	
NAME: TS-500	**TYPE:**	**WEIGHT:**
SPECIFICATION:	**DIMENSION:**	**SERIAL No.:**

UNIT: ×100cd

H(DEG) / V(DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20
-90.0	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02
-85.0	0.02	0.00	0.03	0.01	0.04	0.02	0.05	0.03	0.06	0.04	0.07	0.05	0.08	0.06	0.09
-80.0	0.02	0.01	0.04	0.04	0.08	0.07	0.12	0.11	0.16	0.15	0.19	0.18	0.22	0.20	0.24
-75.0	0.02	0.02	0.07	0.07	0.13	0.14	0.20	0.22	0.28	0.29	0.35	0.35	0.41	0.41	0.46
-70.0	0.02	0.03	0.09	0.11	0.19	0.22	0.30	0.35	0.42	0.47	0.55	0.59	0.67	0.70	0.77
-65.0	0.02	0.04	0.11	0.16	0.24	0.32	0.41	0.50	0.59	0.70	0.79	0.89	0.98	1.04	1.11
-60.0	0.02	0.05	0.13	0.21	0.31	0.42	0.53	0.68	0.79	0.97	1.05	1.18	1.23	1.32	1.36
-55.0	0.02	0.06	0.16	0.26	0.37	0.53	0.65	0.88	1.00	1.18	1.24	1.39	1.42	1.57	1.59
-50.0	0.02	0.07	0.18	0.31	0.44	0.65	0.81	1.04	1.19	1.32	1.44	1.56	1.69	1.90	2.00
-45.0	0.02	0.08	0.20	0.37	0.51	0.75	0.99	1.16	1.35	1.44	1.66	1.79	2.15	2.43	2.90
-40.0	0.02	0.10	0.22	0.42	0.60	0.84	1.12	1.26	1.45	1.62	1.89	2.24	2.92	3.78	5.13
-35.0	0.02	0.11	0.23	0.45	0.68	0.93	1.20	1.38	1.53	1.89	2.26	3.19	4.55	6.93	9.17
-30.0	0.02	0.12	0.25	0.48	0.77	1.03	1.24	1.48	1.70	2.13	3.05	4.70	7.82	12.3	17.4
-25.0	0.02	0.13	0.28	0.51	0.82	1.12	1.31	1.53	1.93	2.57	4.11	7.35	13.3	19.7	33.3
-20.0	0.02	0.14	0.31	0.53	0.85	1.17	1.39	1.61	2.06	3.19	5.70	11.3	18.8	42.1	141
-15.0	0.02	0.15	0.33	0.57	0.87	1.18	1.43	1.76	2.30	3.74	7.39	15.2	24.5	125	220
-10.0	0.02	0.15	0.35	0.62	0.93	1.19	1.42	1.79	2.54	4.56	9.07	17.8	52.2	194	264
-5.0	0.02	0.16	0.37	0.66	1.00	1.26	1.49	1.87	2.67	4.86	10.1	20.2	93.4	219	306
0.0	0.02	0.16	0.39	0.69	1.04	1.32	1.58	2.04	3.14	6.45	14.0	25.9	160	262	383
5.0	0.02	0.17	0.39	0.70	1.06	1.34	1.61	2.09	3.21	6.42	14.2	26.1	153	255	365
10.0	0.02	0.17	0.40	0.70	1.06	1.35	1.61	2.03	3.06	5.70	13.1	24.3	119	238	321
15.0	0.02	0.17	0.39	0.69	1.04	1.30	1.53	1.88	2.78	5.03	10.7	21.1	62.6	204	267
20.0	0.02	0.17	0.39	0.67	0.99	1.24	1.48	1.83	2.50	4.03	7.83	17.7	30.2	122	222
25.0	0.02	0.16	0.38	0.63	0.92	1.20	1.45	1.71	2.14	3.25	5.76	12.3	20.3	37.0	122
30.0	0.02	0.16	0.36	0.58	0.85	1.17	1.39	1.56	1.94	2.63	4.01	7.04	13.3	19.4	28.5
35.0	0.02	0.15	0.34	0.53	0.80	1.12	1.29	1.49	1.76	2.10	2.98	4.36	7.08	10.7	15.8
40.0	0.02	0.15	0.30	0.48	0.74	1.01	1.20	1.42	1.56	1.84	2.23	2.99	4.09	5.89	7.74
45.0	0.02	0.14	0.27	0.43	0.67	0.89	1.12	1.31	1.42	1.64	1.80	2.20	2.58	3.30	4.13
50.0	0.02	0.13	0.24	0.39	0.59	0.75	1.01	1.17	1.32	1.45	1.58	1.76	1.99	2.19	2.54
55.0	0.02	0.12	0.21	0.34	0.50	0.64	0.87	1.00	1.21	1.28	1.43	1.48	1.65	1.68	1.86
60.0	0.02	0.11	0.17	0.30	0.42	0.55	0.70	0.84	1.03	1.12	1.25	1.30	1.40	1.44	1.51
65.0	0.02	0.09	0.15	0.25	0.33	0.45	0.56	0.67	0.80	0.92	1.03	1.11	1.19	1.24	1.27
70.0	0.02	0.08	0.12	0.21	0.25	0.35	0.42	0.52	0.59	0.69	0.76	0.85	0.90	0.99	1.01
75.0	0.02	0.07	0.09	0.16	0.18	0.26	0.29	0.38	0.40	0.49	0.51	0.59	0.60	0.67	0.67
80.0	0.02	0.06	0.06	0.12	0.12	0.18	0.18	0.25	0.25	0.31	0.31	0.37	0.36	0.41	0.39
85.0	0.02	0.05	0.04	0.07	0.07	0.11	0.10	0.14	0.13	0.17	0.15	0.19	0.17	0.21	0.18
90.0	0.02	0.03	0.02	0.04	0.02	0.04	0.02	0.05	0.03	0.05	0.03	0.05	0.03	0.05	0.03

Test System:HOPOO HPG1900 **Test Set: 5.0deg/s C-Gamma (TYPE C)**
Temperature:25.3DEG **Humidity:65.0%**
Operators: **Test Distance:8.600 m**
Test Date:2017-8-17 **Remarks:**

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	**Address:**	
NAME: TS-500	**TYPE:**	**WEIGHT:**
SPECIFICATION:	**DIMENSION:**	**SERIAL No.:**

UNIT: ×100cd

H(DEG) / V(DEG)	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55
-90.0	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00
-85.0	0.06	0.09	0.06	0.09	0.06	0.08	0.05	0.08	0.05	0.07	0.04	0.06	0.03	0.05	0.02
-80.0	0.21	0.26	0.22	0.26	0.22	0.25	0.20	0.23	0.18	0.20	0.15	0.17	0.12	0.13	0.09
-75.0	0.44	0.49	0.45	0.50	0.44	0.48	0.42	0.44	0.38	0.38	0.32	0.31	0.25	0.24	0.18
-70.0	0.77	0.84	0.80	0.85	0.78	0.82	0.74	0.73	0.65	0.61	0.53	0.49	0.41	0.37	0.29
-65.0	1.13	1.19	1.17	1.23	1.15	1.18	1.11	1.09	1.01	0.94	0.84	0.73	0.62	0.51	0.43
-60.0	1.40	1.45	1.44	1.50	1.44	1.46	1.41	1.36	1.32	1.22	1.16	1.01	0.91	0.71	0.59
-55.0	1.70	1.75	1.75	1.83	1.76	1.77	1.74	1.64	1.62	1.45	1.41	1.24	1.16	0.96	0.80
-50.0	2.21	2.29	2.38	2.48	2.37	2.29	2.24	2.06	1.96	1.77	1.63	1.48	1.34	1.17	0.99
-45.0	3.36	3.72	4.03	4.16	3.93	3.58	3.25	2.86	2.51	2.24	1.90	1.75	1.50	1.37	1.13
-40.0	6.40	7.32	8.07	8.31	7.85	6.98	5.96	4.72	3.53	2.87	2.29	1.98	1.71	1.51	1.27
-35.0	12.3	16.1	18.4	19.1	18.1	15.3	10.9	8.44	6.25	4.11	3.06	2.31	1.98	1.62	1.43
-30.0	22.2	30.7	42.0	43.9	37.1	27.9	21.7	15.5	10.1	6.92	4.18	2.94	2.19	1.80	1.56
-25.0	96.1	161	196	205	187	136	62.7	26.4	17.9	10.6	6.38	3.67	2.55	2.02	1.63
-20.0	216	249	282	290	281	248	204	91.0	28.5	17.3	8.74	4.86	2.99	2.13	1.73
-15.0	279	352	425	455	419	346	276	207	67.3	22.3	13.1	6.28	3.38	2.34	1.89
-10.0	370	522	681	760	665	505	360	261	146	30.1	16.0	7.62	3.98	2.54	1.93
-5.0	467	730	1258	1715	1114	694	448	302	201	42.0	18.4	8.41	4.22	2.61	1.99
0.0	613	1097	3232	4011	1871	828	495	317	223	51.6	19.8	9.06	4.57	2.78	2.08
5.0	573	963	2043	3289	1872	827	490	311	221	73.7	20.7	9.67	4.93	2.83	2.11
10.0	467	683	987	1173	913	617	410	281	202	52.2	19.0	8.73	4.40	2.70	2.02
15.0	353	468	577	618	549	429	318	239	145	30.1	16.1	7.53	4.04	2.51	1.89
20.0	269	322	368	383	351	300	243	190	64.2	21.2	13.0	6.07	3.35	2.32	1.84
25.0	205	237	253	258	245	224	174	74.9	23.2	16.0	8.04	4.61	2.93	2.07	1.73
30.0	66.8	124	158	165	145	98.7	44.6	21.6	15.7	9.48	5.70	3.41	2.43	1.92	1.58
35.0	20.0	22.4	32.1	27.8	25.3	21.4	17.9	12.9	8.49	5.89	3.71	2.71	2.03	1.76	1.49
40.0	10.1	13.1	14.8	15.1	14.1	11.7	8.76	6.80	5.07	3.58	2.69	2.15	1.81	1.58	1.41
45.0	4.96	5.89	6.35	6.37	6.12	5.49	4.52	3.75	3.04	2.44	2.14	1.77	1.65	1.42	1.28
50.0	2.78	3.09	3.21	3.14	3.15	3.00	2.61	2.46	2.18	1.97	1.74	1.59	1.45	1.31	1.12
55.0	1.92	2.00	2.09	2.02	2.08	2.00	1.93	1.88	1.69	1.65	1.48	1.43	1.27	1.17	0.93
60.0	1.56	1.57	1.63	1.57	1.64	1.59	1.57	1.52	1.44	1.40	1.29	1.23	1.08	0.96	0.74
65.0	1.33	1.32	1.38	1.33	1.39	1.33	1.33	1.27	1.23	1.16	1.08	0.98	0.84	0.71	0.57
70.0	1.08	1.07	1.12	1.07	1.12	1.05	1.06	0.98	0.95	0.85	0.79	0.68	0.60	0.50	0.43
75.0	0.73	0.71	0.76	0.71	0.75	0.69	0.70	0.63	0.62	0.54	0.52	0.44	0.41	0.33	0.31
80.0	0.44	0.40	0.45	0.40	0.44	0.39	0.42	0.36	0.38	0.31	0.32	0.26	0.26	0.20	0.20
85.0	0.22	0.18	0.22	0.18	0.22	0.18	0.20	0.16	0.18	0.14	0.16	0.12	0.13	0.09	0.10
90.0	0.05	0.03	0.05	0.03	0.05	0.03	0.05	0.02	0.04	0.02	0.04	0.02	0.04	0.01	0.03

Test System:HOPOO HPG1900 **Test Set: 5.0deg/s C-Gamma (TYPE C)**
Temperature:25.3DEG **Humidity:65.0%**
Operators: **Test Distance:8.600 m**
Test Date:2017-8-17 **Remarks:**

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER:	**Address:**	
NAME: TS-500	**TYPE:**	**WEIGHT:**
SPECIFICATION:	**DIMENSION:**	**SERIAL No.:**

UNIT: ×100cd

H(DEG) / V(DEG)	60	65	70	75	80	85	90
-90.0	0.02	0.00	0.02	0.00	0.02	0.00	0.02
-85.0	0.04	0.01	0.03	0.00	0.02	0.00	0.02
-80.0	0.09	0.05	0.06	0.02	0.03	0.00	0.02
-75.0	0.17	0.11	0.10	0.05	0.05	0.00	0.02
-70.0	0.25	0.18	0.15	0.08	0.06	0.01	0.02
-65.0	0.35	0.26	0.20	0.12	0.08	0.02	0.02
-60.0	0.45	0.35	0.25	0.16	0.10	0.03	0.02
-55.0	0.56	0.46	0.31	0.21	0.12	0.04	0.02
-50.0	0.72	0.56	0.36	0.26	0.14	0.04	0.02
-45.0	0.91	0.65	0.43	0.30	0.16	0.05	0.02
-40.0	1.09	0.76	0.51	0.35	0.17	0.06	0.02
-35.0	1.19	0.85	0.59	0.38	0.19	0.07	0.02
-30.0	1.26	0.99	0.67	0.40	0.20	0.08	0.02
-25.0	1.34	1.09	0.73	0.43	0.22	0.09	0.02
-20.0	1.45	1.16	0.77	0.45	0.24	0.10	0.02
-15.0	1.50	1.18	0.80	0.48	0.26	0.10	0.02
-10.0	1.51	1.20	0.85	0.51	0.28	0.11	0.02
-5.0	1.56	1.26	0.89	0.54	0.29	0.11	0.02
0.0	1.62	1.30	0.93	0.55	0.30	0.12	0.02
5.0	1.63	1.31	0.95	0.57	0.31	0.12	0.02
10.0	1.60	1.31	0.96	0.57	0.31	0.12	0.02
15.0	1.52	1.26	0.94	0.57	0.31	0.12	0.02
20.0	1.47	1.19	0.88	0.55	0.30	0.12	0.02
25.0	1.44	1.14	0.80	0.51	0.29	0.12	0.02
30.0	1.37	1.10	0.73	0.47	0.28	0.11	0.02
35.0	1.26	1.04	0.68	0.43	0.26	0.11	0.02
40.0	1.14	0.91	0.62	0.38	0.23	0.10	0.02
45.0	1.06	0.78	0.56	0.34	0.20	0.09	0.02
50.0	0.93	0.64	0.49	0.30	0.18	0.09	0.02
55.0	0.77	0.53	0.41	0.27	0.15	0.08	0.02
60.0	0.60	0.45	0.33	0.23	0.12	0.07	0.02
65.0	0.46	0.36	0.26	0.19	0.10	0.06	0.02
70.0	0.33	0.28	0.19	0.15	0.08	0.05	0.02
75.0	0.23	0.21	0.13	0.12	0.05	0.04	0.02
80.0	0.14	0.14	0.08	0.08	0.03	0.04	0.02
85.0	0.06	0.08	0.04	0.05	0.02	0.03	0.02
90.0	0.01	0.03	0.01	0.02	0.00	0.02	0.02

Test System:HOPOO HPG1900 **Test Set: 5.0deg/s C-Gamma (TYPE C)**
Temperature:25.3DEG **Humidity:65.0%**
Operators: **Test Distance:8.600 m**
Test Date:2017-8-17 **Remarks:**