

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

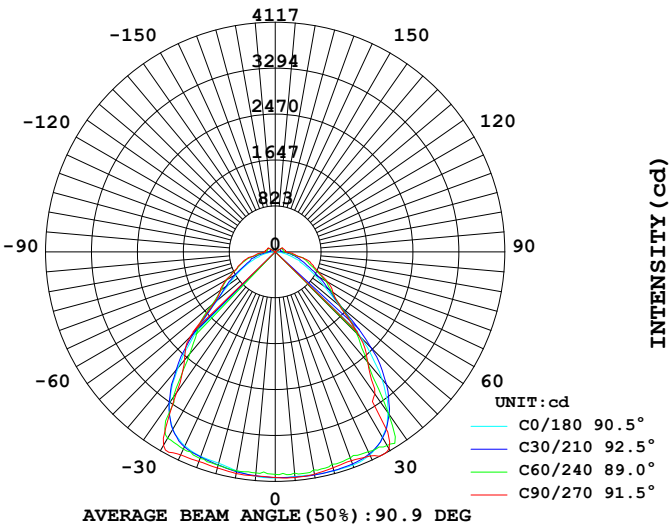
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

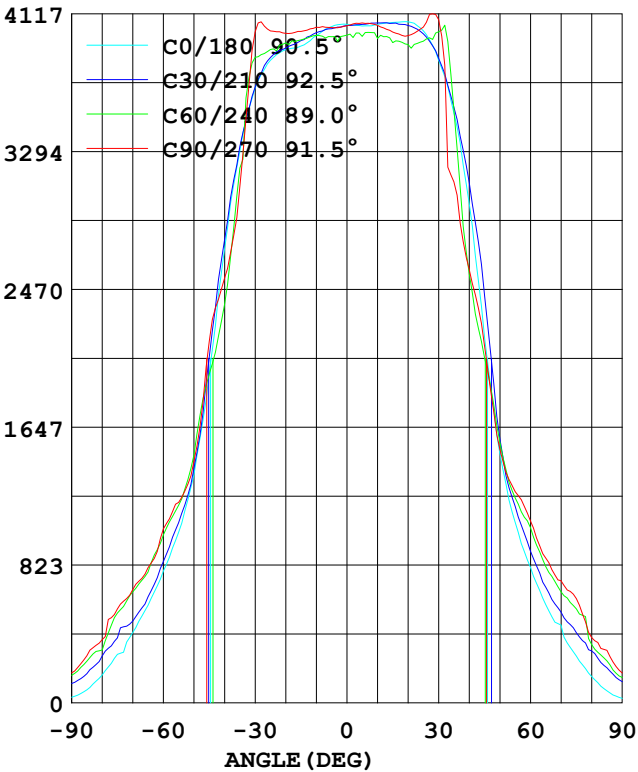
MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:

DATA OF LAMP		Imax(cd)	4117	S/MH(C0/180)	1.27
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.26
NOMINAL POWER(W)	70	TOTAL FLUX(lm)	9819.1	Voltage(V)	219.8
RATED VOLTAGE(V)	220	EFFICIENCY(lm/W)	139.4	Current(A)	0.327
NOMINAL FLUX(lm)	9819.2	η up(%)	3.4	Power(W)	70.44
LAMPS QUANTITY	1	η down(%)	96.6	Power Factor(PF)	0.979
TEST VOLTAGE(V)	219.8	Effective Flux(lm)	9116.2	EEI	0.105

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

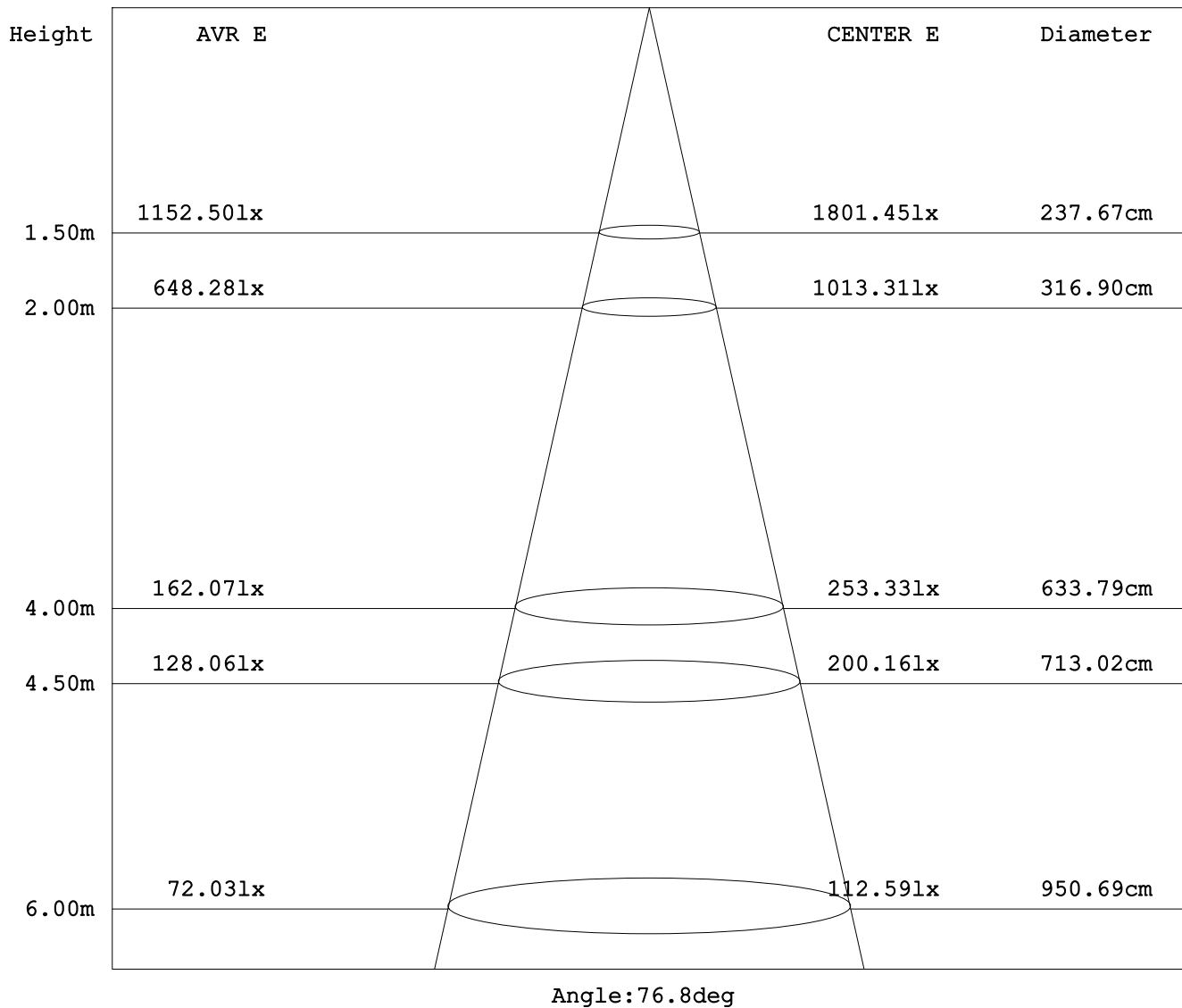
Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zOne	total
5.0	4041	4004	4035	4015	4045	4017	4063	4040	0- 5	96.35	96.35
10.0	3987	3996	4037	4009	4054	4016	4048	4011	5- 10	287.8	384.2
15.0	3924	3959	4012	4015	4065	4002	4008	3949	10- 15	474.8	859.1
20.0	3903	3928	4000	4016	4069	3990	3986	3904	15- 20	655.8	1515
25.0	3840	3880	4015	3988	4015	3975	4038	3850	20- 25	829.8	2345
30.0	3675	3767	4007	3879	3839	3930	4082	3738	25- 30	988.8	3334
35.0	3297	3261	3087	3609	3525	3551	3113	3465	30- 35	1076	4409
40.0	2710	2572	2537	2804	2981	2835	2588	2664	35- 40	1018	5427
45.0	1974	2018	2163	2068	2177	2244	2128	1954	40- 45	887.4	6315
50.0	1362	1442	1444	1559	1491	1569	1515	1517	45- 50	716.6	7031
55.0	1019	1129	1198	1158	1078	1199	1262	1171	50- 55	569.3	7601
60.0	787.5	923.8	1040	890.8	809.9	977.4	1087	896.6	55- 60	479.2	8080
65.0	583.2	707.4	807.4	698.5	586.8	752.4	864.6	703.9	60- 65	395.3	8475
70.0	421.2	576.2	677.4	543.7	465.6	603.2	730.1	557.3	65- 70	322.8	8798
75.0	290.6	462.8	561.9	413.8	279.7	490.4	622.7	414.7	70- 75	263.8	9062
80.0	166.3	298.6	378.0	268.6	157.7	329.8	390.3	295.7	75- 80	200.3	9262
85.0	78.28	212.0	281.6	192.1	72.23	230.3	313.9	203.8	80- 85	133.4	9395
90.0	33.51	140.7	179.4	123.2	27.10	138.7	178.7	121.9	85- 90	85.63	9481
95.0	21.17	132.1	186.2	112.7	17.54	133.4	192.6	112.3	90- 95	64.88	9546
100.0	18.75	117.4	170.3	98.25	15.00	123.2	180.0	102.7	95-100	58.78	9605
105.0	19.11	120.3	158.1	99.82	16.94	123.6	168.5	105.9	100-105	56.12	9661
110.0	20.08	119.0	151.1	98.85	18.75	123.6	155.9	103.5	105-110	54.36	9715
115.0	22.26	112.6	148.3	95.77	21.65	119.3	153.5	100.6	110-115	51.53	9767
120.0	23.83	103.1	143.8	92.74	25.28	114.6	145.2	96.80	115-120	47.83	9815
125.0	0	0	0	0	0	0	0	0	120-125	4.538	9819
130.0	0	0	0	0	0	0	0	0	125-130	0	9819
135.0	0	0	0	0	0	0	0	0	130-135	0	9819
140.0	0	0	0	0	0	0	0	0	135-140	0	9819
145.0	0	0	0	0	0	0	0	0	140-145	0	9819
150.0	0	0	0	0	0	0	0	0	145-150	0	9819
155.0	0	0	0	0	0	0	0	0	150-155	0	9819
160.0	0	0	0	0	0	0	0	0	155-160	0	9819
165.0	0	0	0	0	0	0	0	0	160-165	0	9819
170.0	0	0	0	0	0	0	0	0	165-170	0	9819
175.0	0	0	0	0	0	0	0	0	170-175	0	9819
180.0	0	0	0	0	0	0	0	0	175-180	0	9819
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

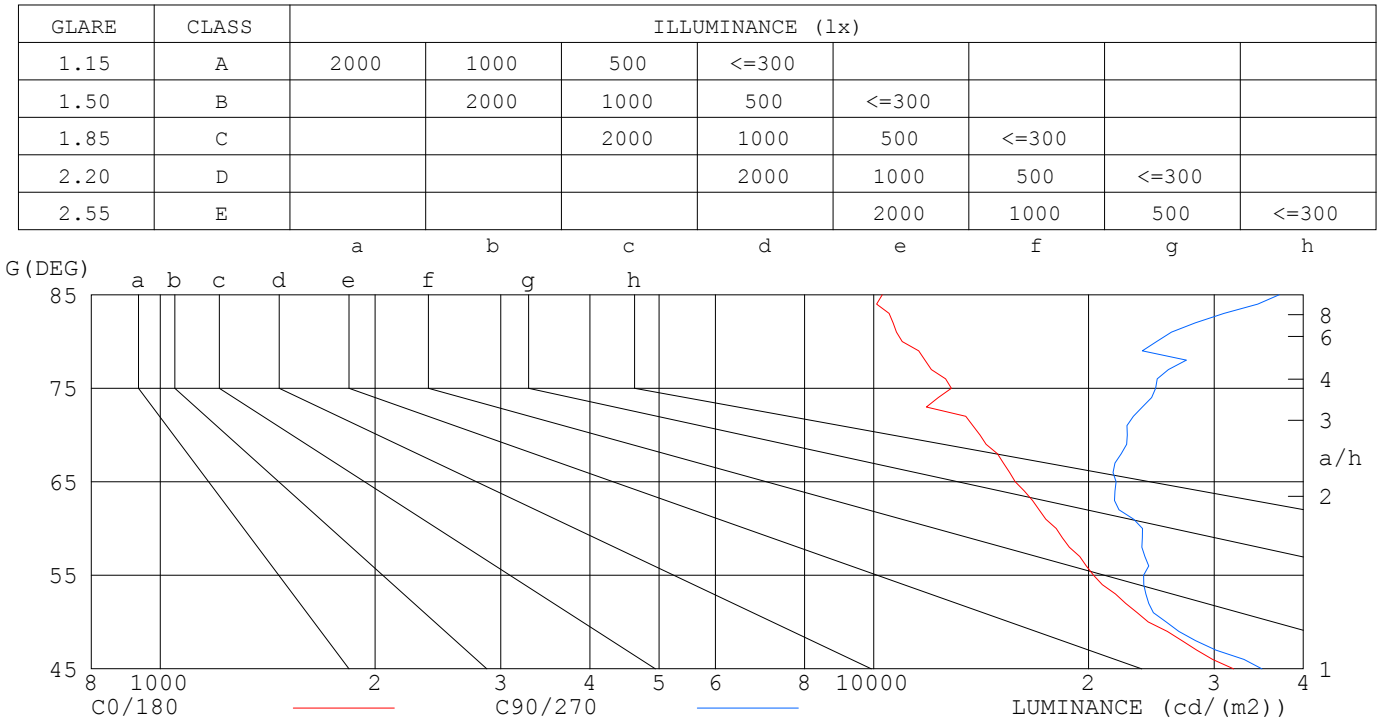
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	10277	36979
80	10962	24907
75	12848	24841
70	14090	22664
65	15790	21860
60	18023	23801
55	20328	23891
50	24248	25704
45	31947	34993

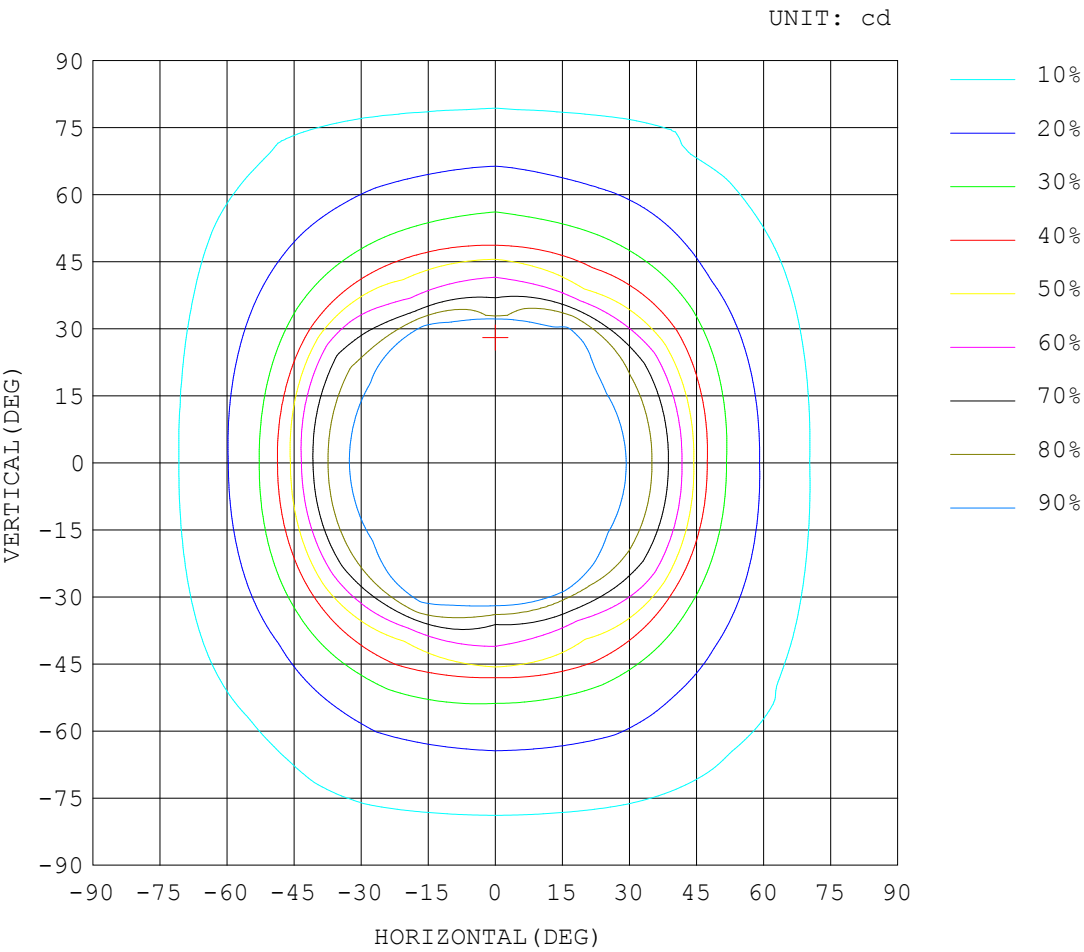
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

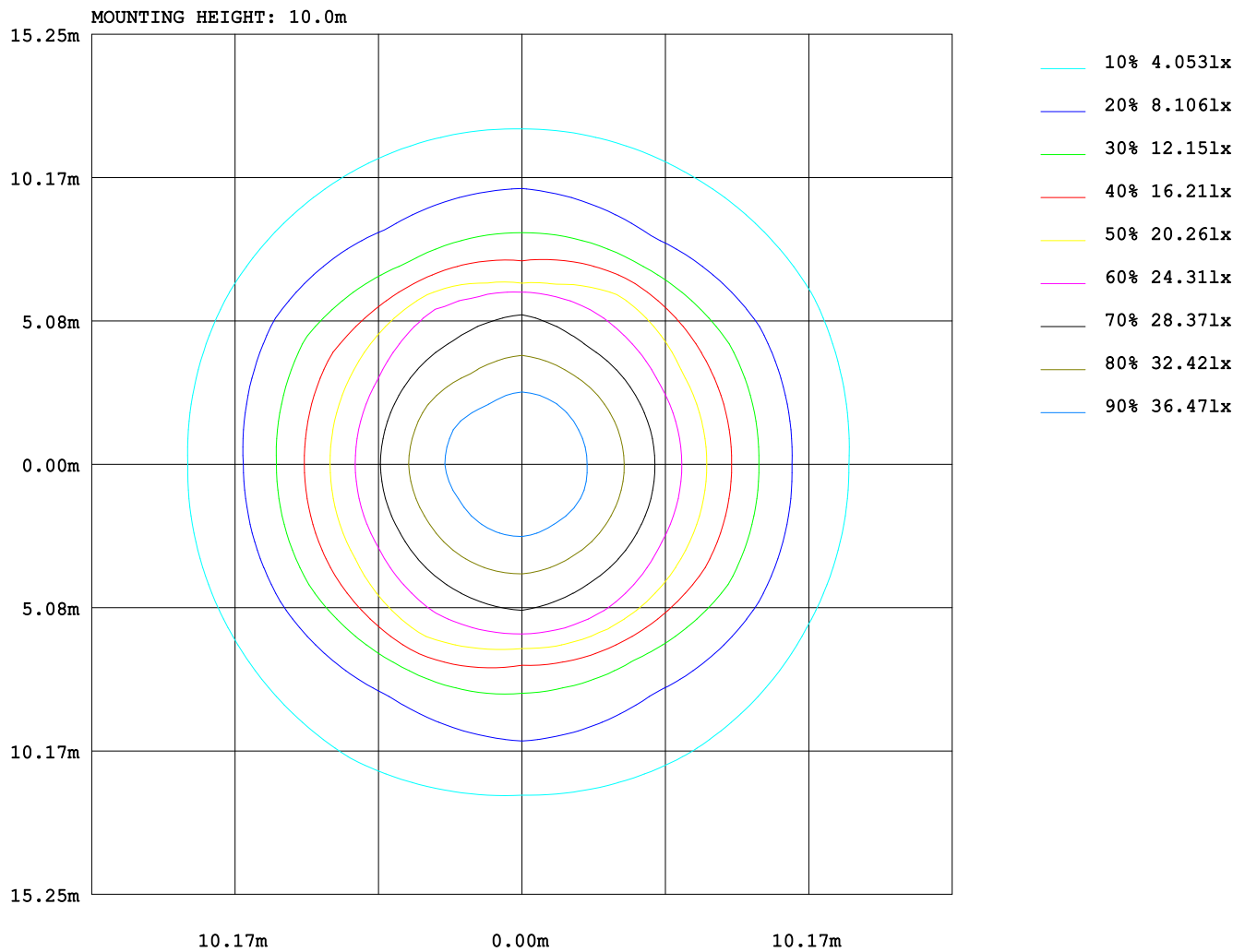
Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AREA LUMINOUS FLUX

Report number:

MANUFACTURER:																			
Address:																			
NAME: RE-RIP5S5-72N1WD-B4-TR										TYPE:					WEIGHT:				
SPECIFICATION:										DIMENSION: 1450*67mm					SERIAL No.:				

		AREA FLUX DIAGRAM																UNIT:lm			Φ t	Φ a
		0.14	0.72	1.78	3.06	4.27	5.49	6.68	7.75	8.56	8.50	7.56	6.38	5.06	3.76	2.56	1.47	0.63	0.14	74.5	0.00	
VERTICAL (DEG)	90																					
	80	0.16	0.99	2.67	4.98	7.73	11.0	14.0	16.2	17.5	17.3	15.5	13.1	10.0	6.87	4.22	2.24	0.87	0.16	146	101	
	70	0.19	1.27	3.64	7.16	11.4	16.1	20.6	24.0	26.1	25.9	23.3	19.5	14.9	10.1	6.00	3.13	1.14	0.19	215	196	
	60	0.22	1.57	4.61	9.11	15.0	22.5	29.8	35.1	38.2	38.1	34.6	28.6	21.1	13.9	8.23	3.99	1.44	0.22	307	295	
	50	0.24	1.85	5.55	11.3	20.1	30.8	43.5	54.9	62.3	61.1	51.9	41.3	29.9	18.4	10.4	5.04	1.73	0.24	451	443	
	40	0.26	2.09	6.43	13.9	26.0	47.2	68.9	87.1	97.2	96.9	87.0	63.9	43.0	25.0	12.9	6.03	1.97	0.27	687	680	
	30	0.27	2.26	7.18	16.4	34.7	69.3	97.1	116	122	121	112	93.1	61.6	32.4	15.4	6.86	2.16	0.28	910	905	
		0.28	2.35	7.72	18.3	43.5	81.6	107	117	121	121	114	102	75.1	39.0	17.4	7.45	2.30	0.29	977	972	
		0.27	2.37	7.91	19.3	47.7	86.4	110	119	122	122	115	105	80.8	42.9	18.3	7.73	2.35	0.29	1010	1005	
		0.27	2.34	7.83	19.2	47.0	86.1	109	119	122	121	116	105	80.7	42.7	18.2	7.73	2.36	0.29	1007	1002	
		0.27	2.26	7.50	17.9	41.6	80.0	106	118	122	121	115	102	74.8	38.3	17.2	7.46	2.34	0.29	973	968	
	-30	0.26	2.10	6.84	15.5	33.1	64.9	97.3	116	122	120	112	89.9	61.1	30.7	15.4	6.86	2.24	0.29	896	890	
	-40	0.24	1.88	5.96	12.8	24.8	44.3	67.5	90.1	97.5	94.2	81.0	63.1	42.0	23.9	13.0	6.07	2.07	0.27	671	664	
	-50	0.22	1.61	4.92	10.2	18.2	29.9	42.9	53.6	61.3	60.9	52.9	41.3	29.0	18.7	10.4	5.28	1.81	0.25	444	435	
	-60	0.19	1.31	3.80	7.88	13.6	20.8	28.3	33.9	36.5	36.3	33.6	28.7	21.4	14.0	8.51	4.43	1.51	0.22	296	283	
	-70	0.16	1.02	2.84	5.67	9.91	14.7	19.2	22.4	24.4	24.6	22.9	20.0	15.5	10.9	6.74	3.37	1.18	0.19	206	185	
-80	0.14	0.75	1.96	3.82	6.40	9.56	12.5	14.7	16.2	16.4	15.1	13.0	10.1	7.07	4.47	2.35	0.90	0.17	136	88.3		
-90	0.12	0.54	1.25	2.29	3.64	5.18	6.52	7.50	8.25	8.30	7.66	6.78	5.54	4.09	2.74	1.57	0.68	0.15	72.8	0.00		
		-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)				20	30	40	50	60	70	80	90	
Φ t	3.90	29.3	90.4	199	409	726	987	1153	1224	1214	1118	943	682	384	193	89.1	29.7	4.19	9819			
Φ a	0.00	0.95	61.4	174	388	708	969	1134	1205	1195	1099	925	664	362	168	59.5	0.00	0.00		9116		

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

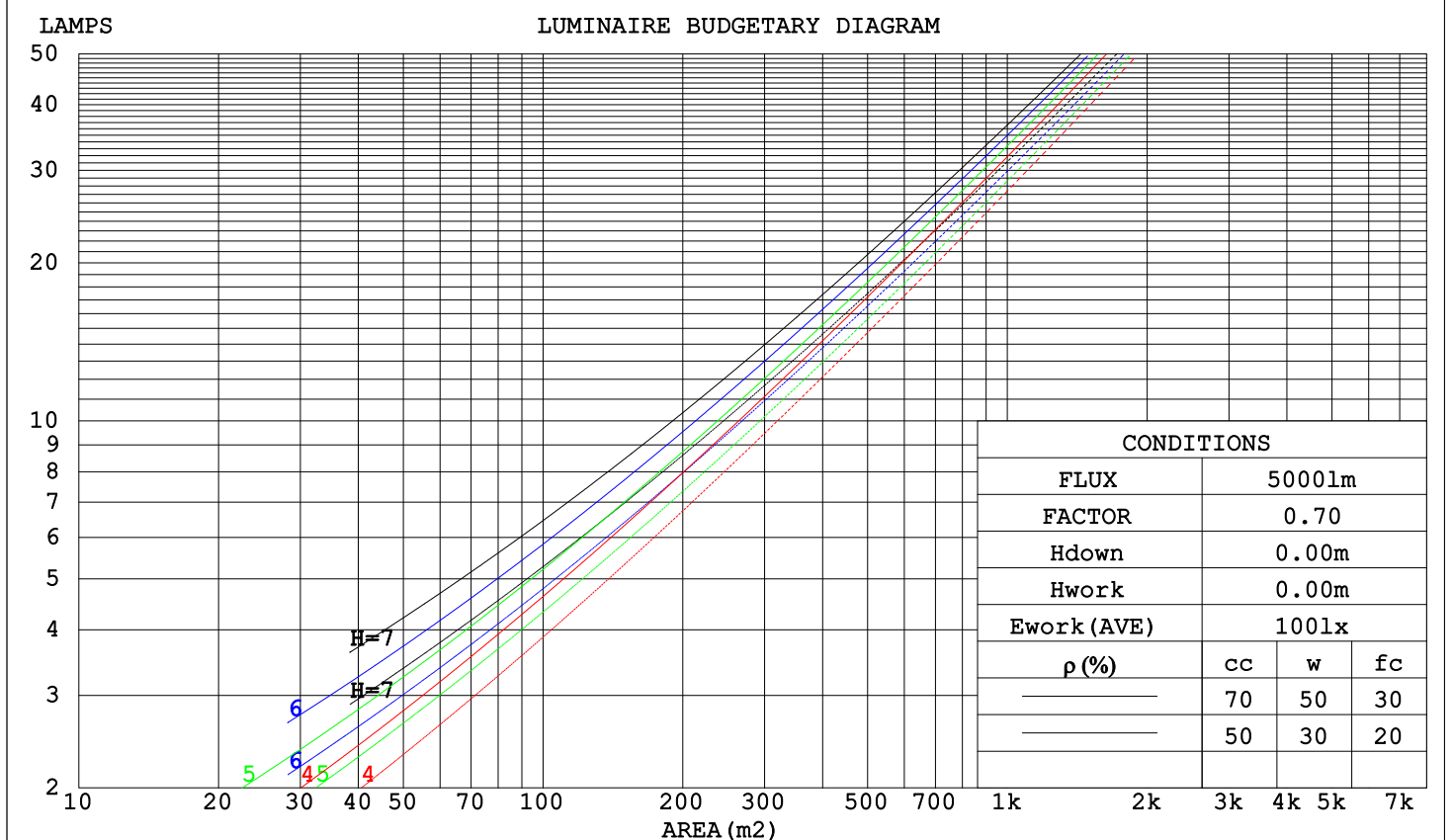
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: RE-RIP5S5-72N1WD-B4-TR								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1450*67mm				SERIAL No.:			

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	RCR:Room Cavity Ratio															



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Report number:

MANUFACTURER:															
Address:															
NAME: RE-RIP5S5-72N1WD-B4-TR								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1450*67mm				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
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.282	.160	.051	.273	.156	.050	.258	.148	.047	.245	.141	.045	.232	.134	.043	
2.0	.262	.144	.044	.255	.141	.043	.242	.135	.042	.230	.129	.040	.218	.124	.039	
3.0	.243	.129	.039	.237	.127	.038	.225	.122	.037	.214	.118	.036	.204	.113	.035	
4.0	.226	.117	.034	.220	.115	.034	.210	.111	.033	.200	.108	.032	.191	.104	.032	
5.0	.210	.107	.031	.205	.105	.031	.196	.102	.030	.187	.099	.029	.179	.096	.029	
6.0	.196	.098	.028	.192	.097	.028	.184	.094	.027	.176	.091	.027	.169	.089	.026	
7.0	.184	.091	.026	.180	.090	.026	.173	.087	.025	.165	.085	.025	.159	.083	.024	
8.0	.173	.084	.024	.169	.083	.024	.163	.081	.023	.156	.079	.023	.150	.077	.022	
9.0	.163	.079	.022	.160	.078	.022	.154	.076	.022	.148	.074	.021	.142	.072	.021	
10.0	.154	.074	.020	.151	.073	.020	.145	.071	.020	.140	.070	.020	.135	.068	.020	

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	.217	.217	.217	.185	.185	.185	.126	.126	.126	.073	.073	.073	.023	.023	.023	
1.0	.205	.183	.163	.175	.157	.140	.120	.108	.097	.069	.062	.056	.022	.020	.018	
2.0	.195	.159	.128	.167	.137	.111	.114	.095	.077	.066	.055	.045	.021	.018	.015	
3.0	.186	.141	.105	.160	.122	.091	.110	.084	.064	.063	.049	.038	.020	.016	.012	
4.0	.178	.127	.089	.153	.110	.077	.105	.077	.054	.061	.045	.032	.020	.015	.011	
5.0	.170	.117	.077	.146	.101	.067	.101	.071	.047	.058	.041	.028	.019	.014	.009	
6.0	.163	.108	.069	.140	.094	.060	.097	.066	.042	.056	.039	.025	.018	.013	.008	
7.0	.157	.101	.062	.135	.088	.054	.093	.062	.039	.054	.036	.023	.018	.012	.008	
8.0	.151	.096	.058	.130	.083	.050	.090	.058	.036	.052	.034	.021	.017	.011	.007	
9.0	.145	.091	.054	.125	.079	.047	.087	.055	.033	.050	.033	.020	.016	.011	.007	
10.0	.140	.086	.051	.121	.075	.044	.084	.053	.031	.049	.031	.019	.016	.010	.006	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

Uncorrected UGR Table

Report number:

MANUFACTURER:										
Address:										
NAME: RE-RIP5S5-72N1WD-B4-TR					TYPE:			WEIGHT:		
SPECIFICATION:					DIMENSION: 1450*67mm			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	22.5	23.8	22.8	24.1	24.3	23.1	24.4	23.4	24.7	24.9
	23.2	24.5	23.6	24.8	25.1	24.4	25.7	24.8	26.0	26.3
	23.6	24.8	23.9	25.1	25.4	25.2	26.4	25.6	26.7	27.0
	23.8	24.9	24.2	25.3	25.6	25.9	27.0	26.3	27.4	27.7
	23.9	25.0	24.3	25.3	25.7	26.3	27.3	26.6	27.6	28.0
	24.0	25.0	24.4	25.3	25.7	26.6	27.7	27.0	28.0	28.4
4H 2H	22.9	24.1	23.2	24.4	24.7	23.4	24.6	23.8	24.9	25.2
	23.9	25.0	24.3	25.3	25.7	25.1	26.1	25.5	26.4	26.8
	24.4	25.4	24.9	25.8	26.2	26.1	27.0	26.5	27.4	27.8
	24.9	25.7	25.3	26.1	26.5	26.9	27.7	27.4	28.1	28.6
	25.0	25.8	25.5	26.2	26.7	27.3	28.1	27.8	28.5	29.0
	25.1	25.8	25.6	26.3	26.7	27.8	28.5	28.3	29.0	29.5
8H 4H	24.9	25.7	25.3	26.1	26.5	26.3	27.1	26.7	27.5	27.9
	25.5	26.2	26.0	26.6	27.1	27.3	27.9	27.8	28.4	28.9
	25.8	26.4	26.3	26.8	27.4	27.9	28.5	28.4	28.9	29.5
	26.0	26.5	26.5	27.0	27.6	28.6	29.1	29.1	29.6	30.1
12H 4H	24.9	25.6	25.4	26.1	26.6	26.3	27.0	26.8	27.4	27.9
	25.7	26.2	26.2	26.7	27.2	27.4	27.9	27.9	28.4	28.9
	26.0	26.5	26.6	27.0	27.6	28.0	28.5	28.6	29.0	29.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.1 / - 0.2				
1.5H	+ 0.4 / - 0.4					+ 0.2 / - 0.2				
2.0H	+ 0.8 / - 0.6					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 9819 lm Total Lamp Luminous Flux. (8log(F/F0) = 7.9)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	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) $k(RI) \times RCR = 5$									
$k = 0.60$	64	53	47	63	53	47	62	53	47	41
0.80	73	63	56	72	63	56	70	62	56	50
1.00	81	71	65	80	70	64	77	71	64	57
1.25	87	78	72	86	77	71	83	76	70	63
1.50	91	83	77	90	82	76	87	80	75	68
2.00	97	90	84	95	88	83	92	86	81	74
2.50	101	94	88	98	92	87	94	89	85	77
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	97	104	100	96	100	96	93	83
5.00	109	104	101	106	102	99	101	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

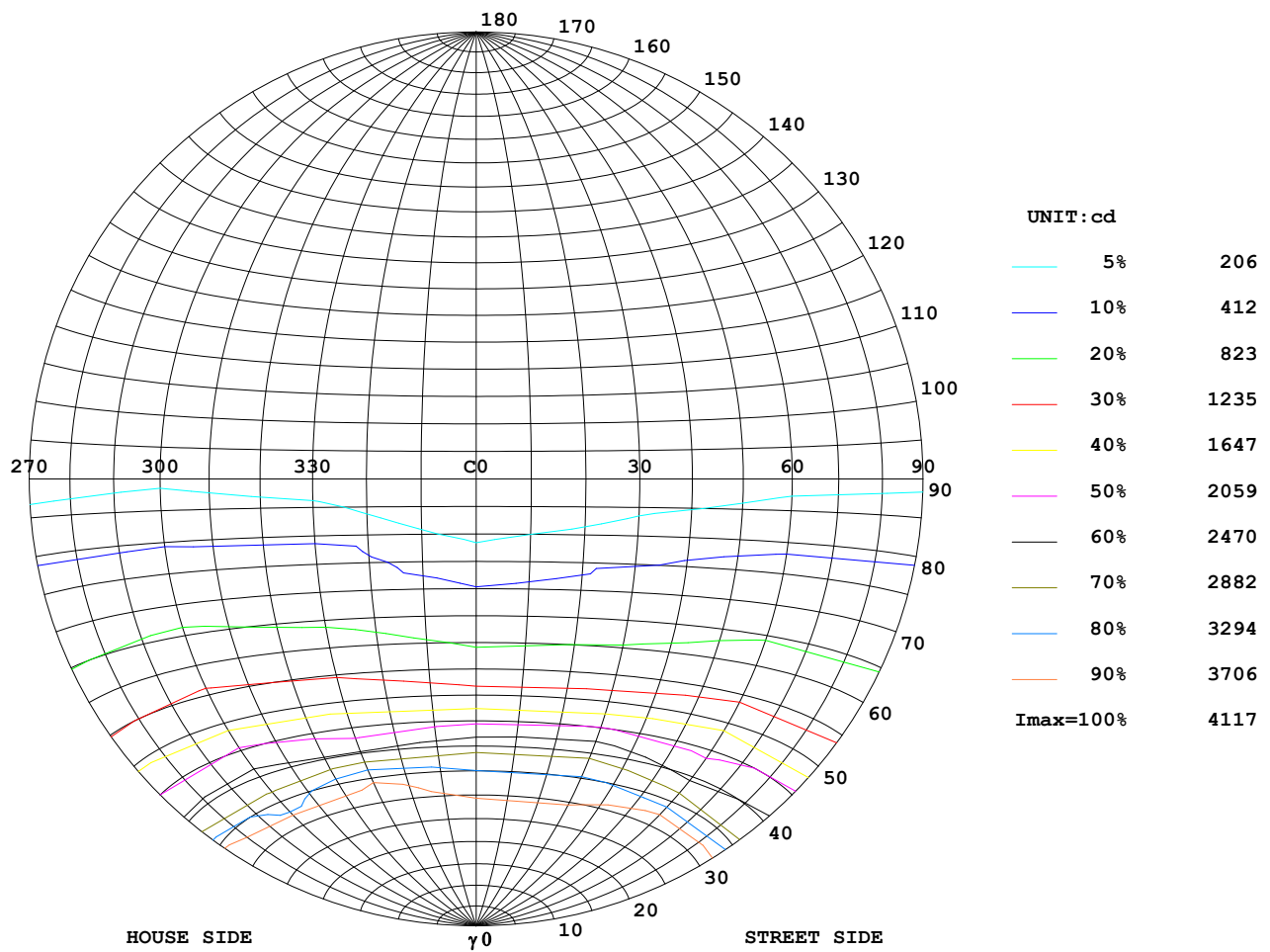
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

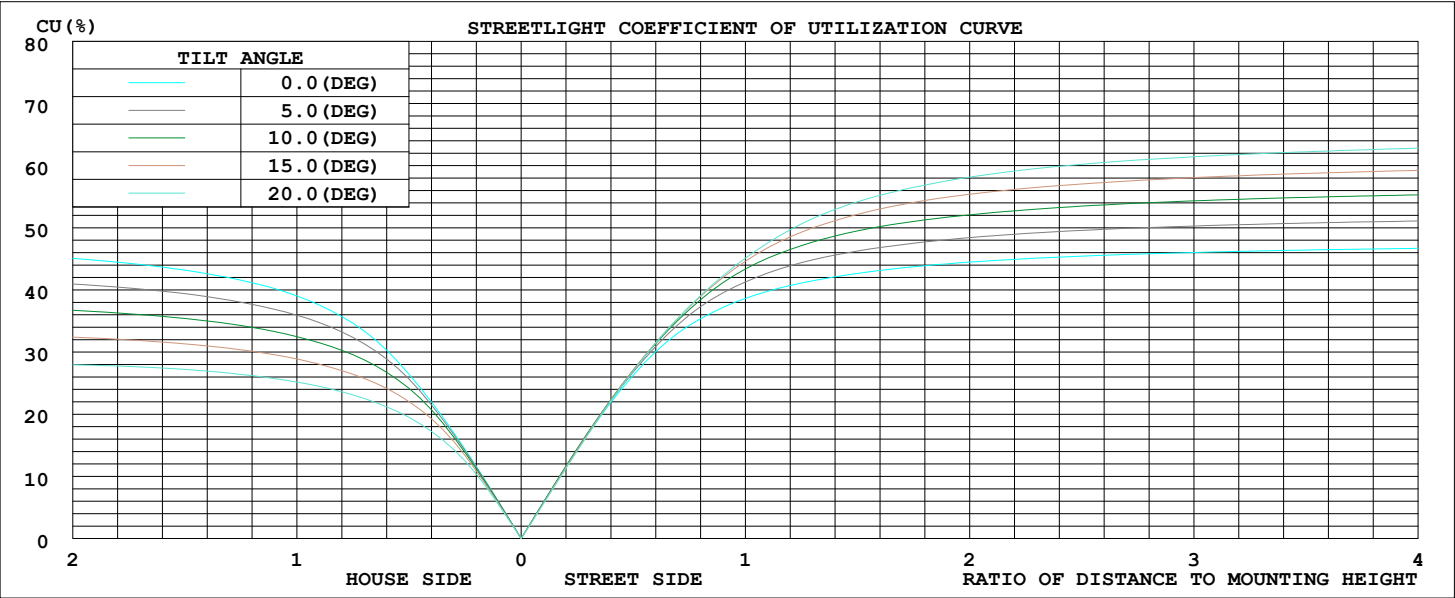
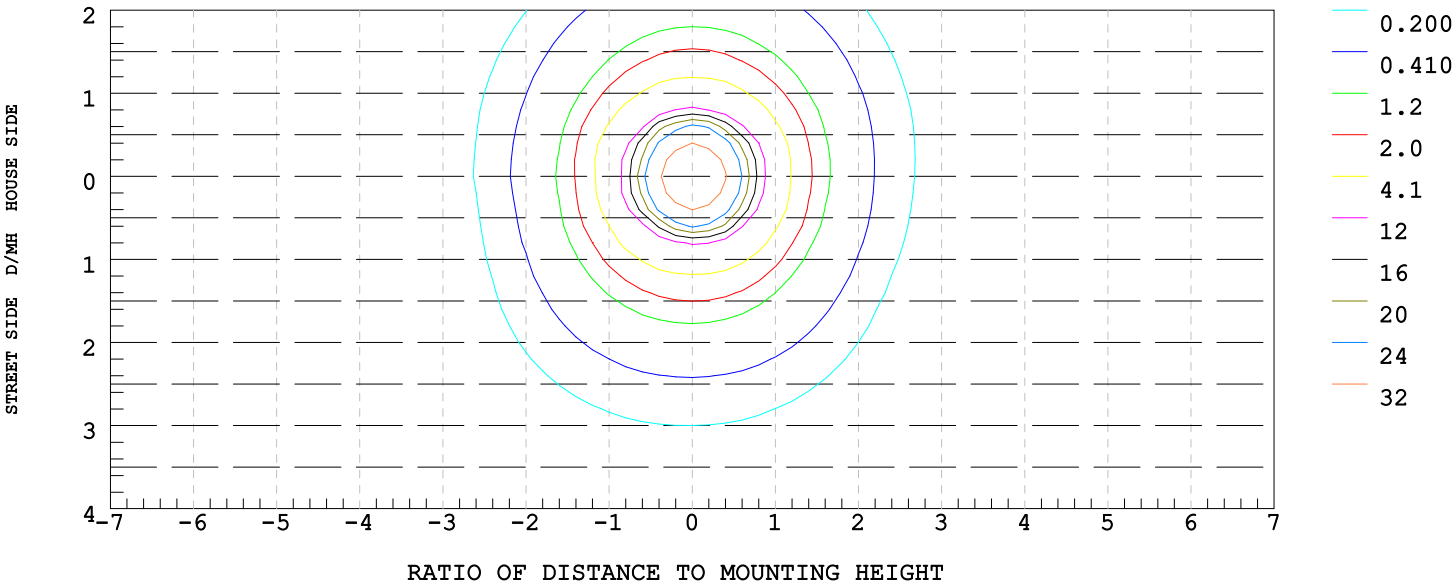
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:

ILLUMINANCE AT MH=10 m,Enadir = 40.53 lx



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

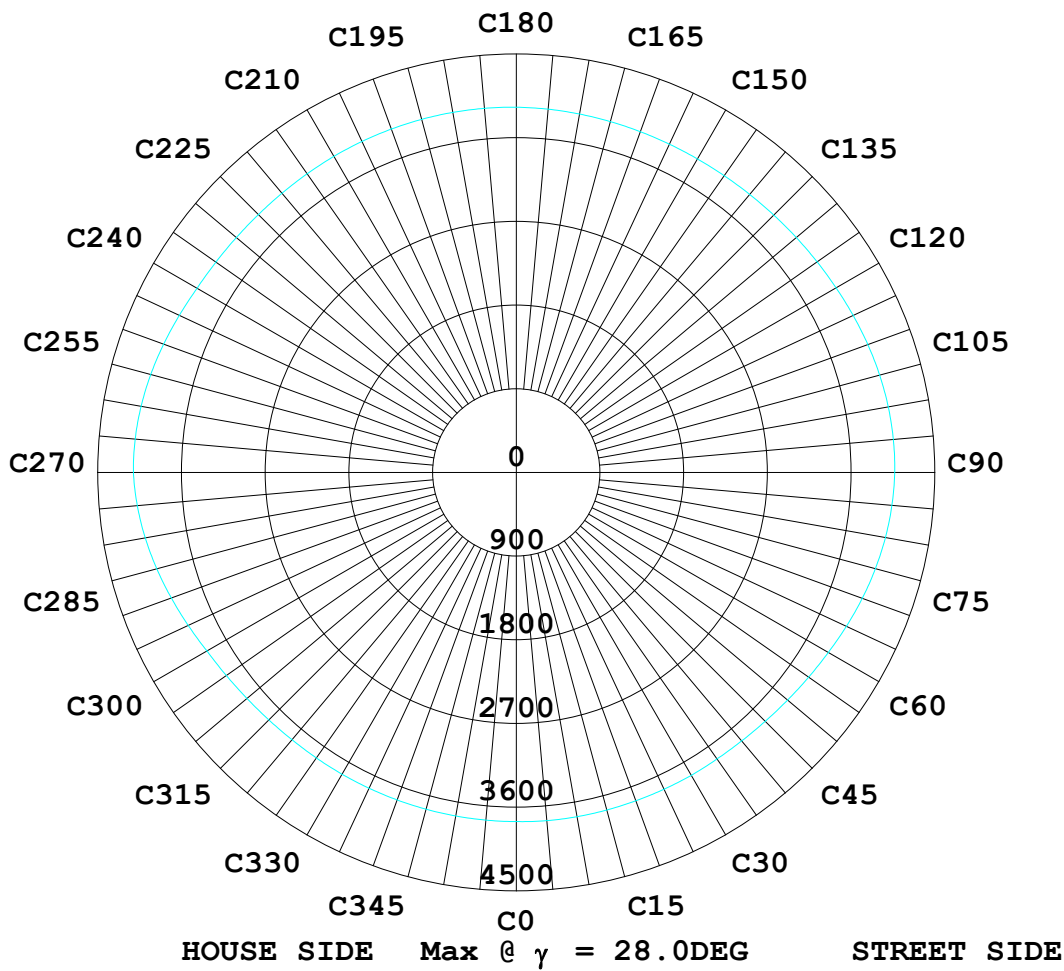
Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RIP5S5-72N1WD-B4-TR	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1450*67mm	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月17日

Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks: