

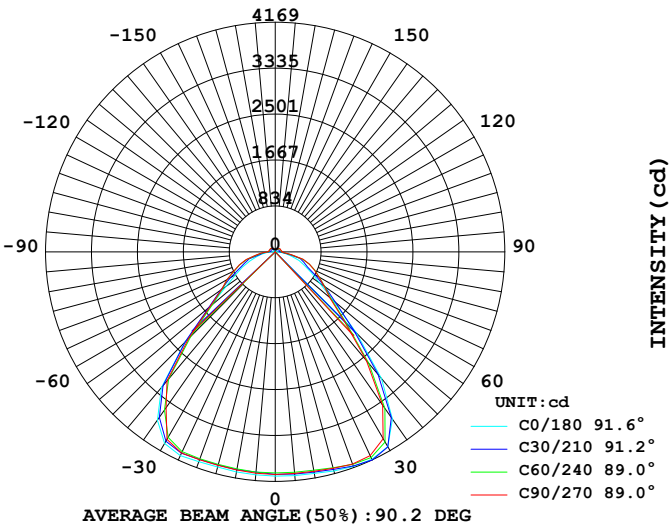
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

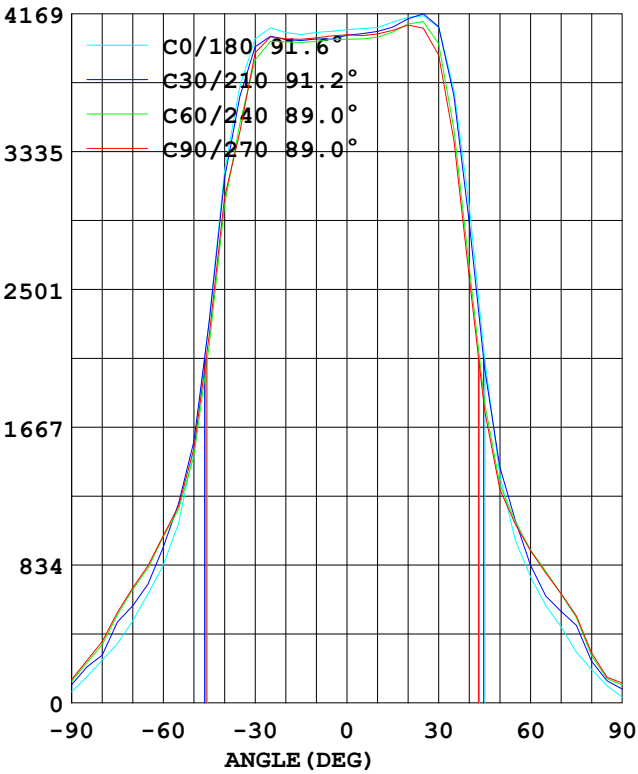
MANUFACTURER:		
Address:		
NAME: RE-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:

DATA OF LAMP		Imax(cd)	4177	S/MH(C0/180)	1.34
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.32
NOMINAL POWER(W)	68	TOTAL FLUX(lm)	10092	Voltage(V)	219.8
RATED VOLTAGE(V)	220	EFFICIENCY(lm/W)	148.2	Current(A)	0.316
NOMINAL FLUX(lm)	10091.7	η up(%)	4.2	Power(W)	68.08
LAMPS QUANTITY	1	η down(%)	95.8	Power Factor(PF)	0.978
TEST VOLTAGE(V)	219.8	Effective Flux(lm)	9306.4	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

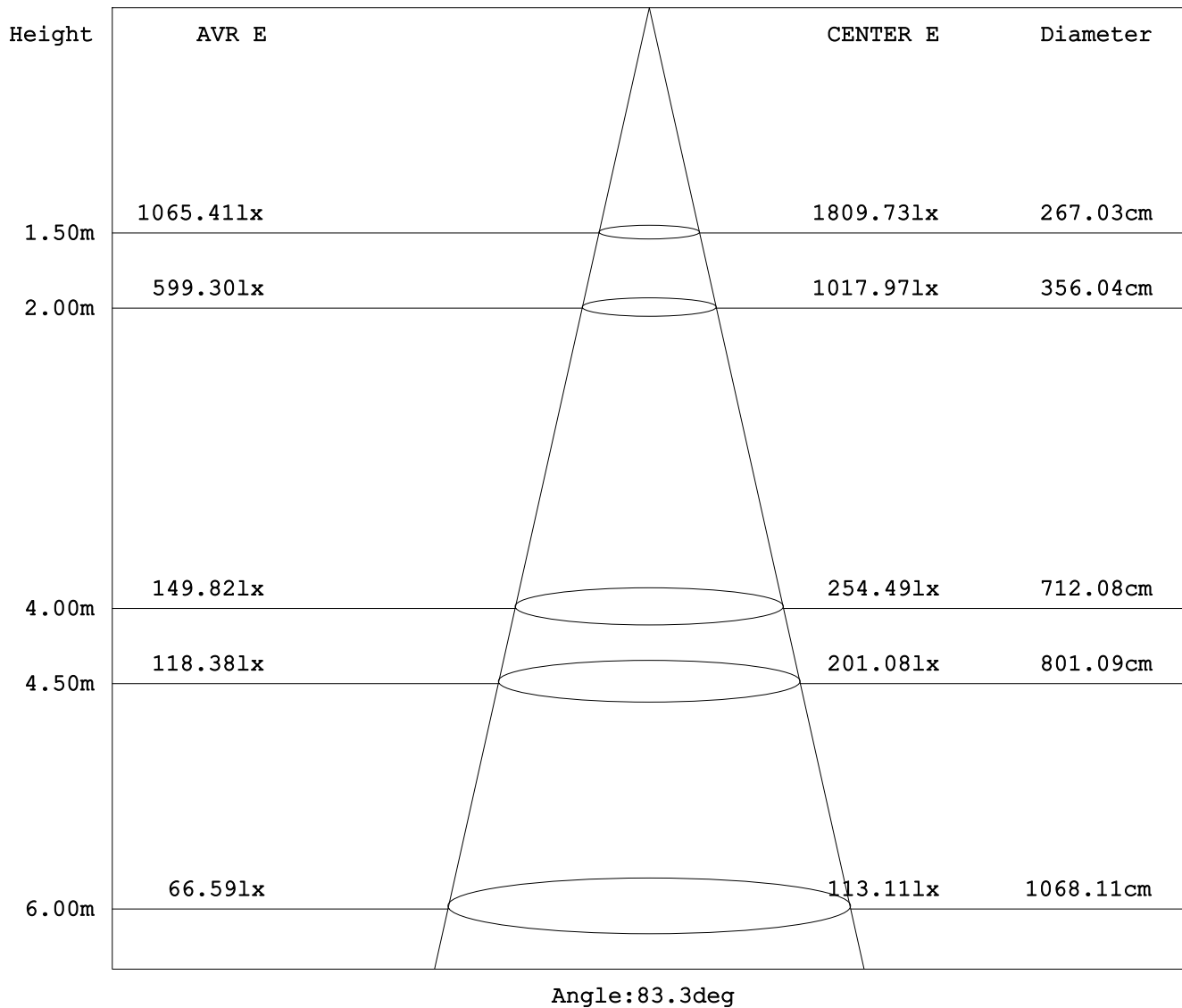
Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:



Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022年09月24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-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
10.0	4056	4063	4023	4029	4085	4067	4046	3986	0- 10	384.6	384.6
20.0	4055	4060	4017	4040	4148	4152	4100	4061	10- 20	1146	1530
30.0	4017	3973	3932	4040	4085	3997	3918	3959	20- 30	1873	3404
40.0	3216	2983	3057	3228	3003	2771	2573	2880	30- 40	2208	5612
50.0	1534	1500	1540	1664	1376	1400	1292	1408	40- 50	1664	7275
60.0	834.4	976.8	1013	891.1	764.5	947.0	921.8	801.0	50- 60	1022	8297
70.0	497.1	651.5	696.8	524.0	460.8	655.5	661.7	524.7	60- 70	716.4	9014
80.0	258.6	336.5	371.5	302.0	202.6	276.8	302.8	249.2	70- 80	462.8	9477
90.0	67.51	102.1	140.4	89.90	34.60	102.9	120.0	80.22	80- 90	195.4	9672
100.0	30.37	88.45	119.1	57.59	26.13	101.5	115.7	69.45	90-100	89.35	9761
110.0	32.79	87.60	111.0	62.79	27.10	98.97	105.6	70.05	100-110	80.06	9841
120.0	32.06	87.24	107.6	60.01	28.67	94.62	105.2	59.29	110-120	73.21	9915
130.0	32.42	78.16	101.6	52.15	32.54	82.52	93.89	50.09	120-130	62.16	9977
140.0	34.84	60.37	84.94	45.85	36.17	62.79	69.57	44.52	130-140	46.62	10023
150.0	38.47	47.55	62.19	40.17	40.65	49.61	51.06	40.89	140-150	31.58	10055
160.0	41.74	41.50	48.03	38.35	43.19	43.19	41.86	42.71	150-160	20.31	10075
170.0	44.77	42.10	44.16	41.74	45.01	45.13	43.31	44.40	160-170	12.11	10087
180.0	45.49	44.16	45.73	43.92	46.10	45.85	44.28	44.64	170-180	4.205	10092
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

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

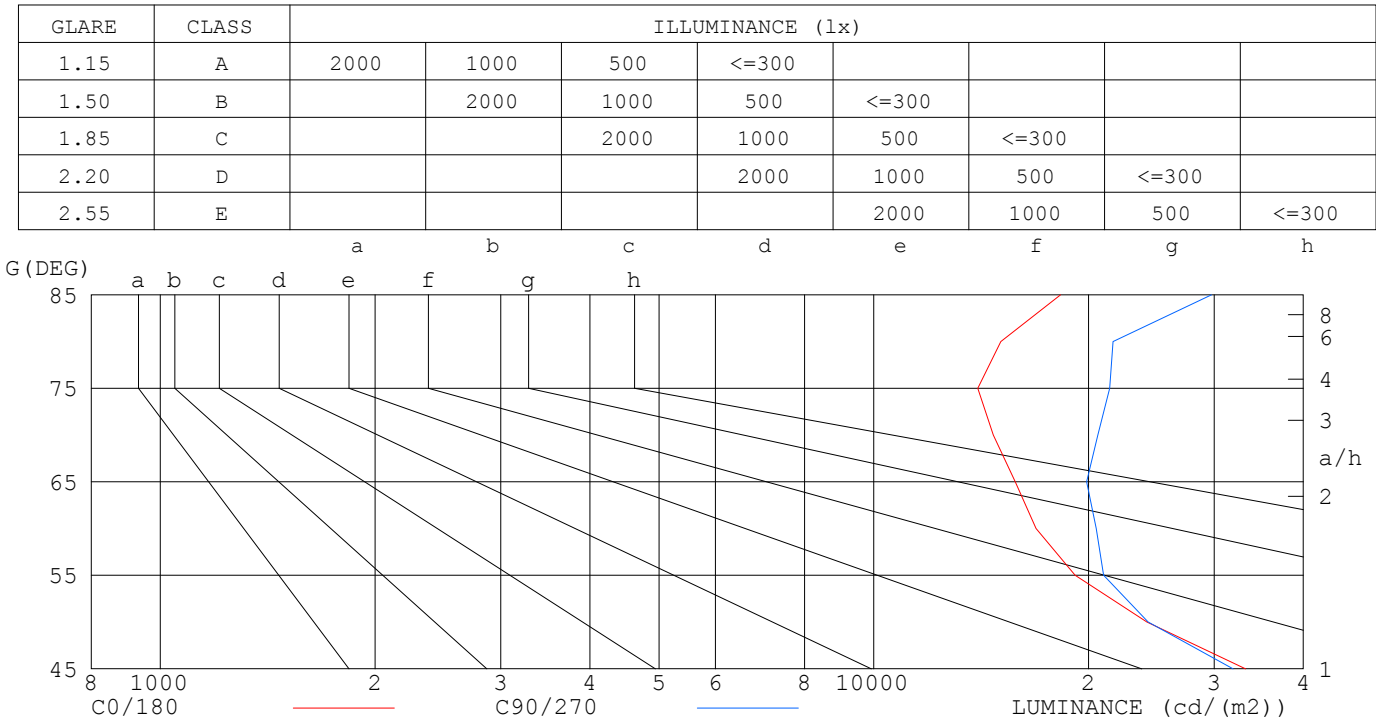
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	18274	29736
80	15073	21650
75	13986	21412
70	14707	20613
65	15790	19874
60	16884	20505
55	19149	21002
50	24138	24241
45	33196	31888

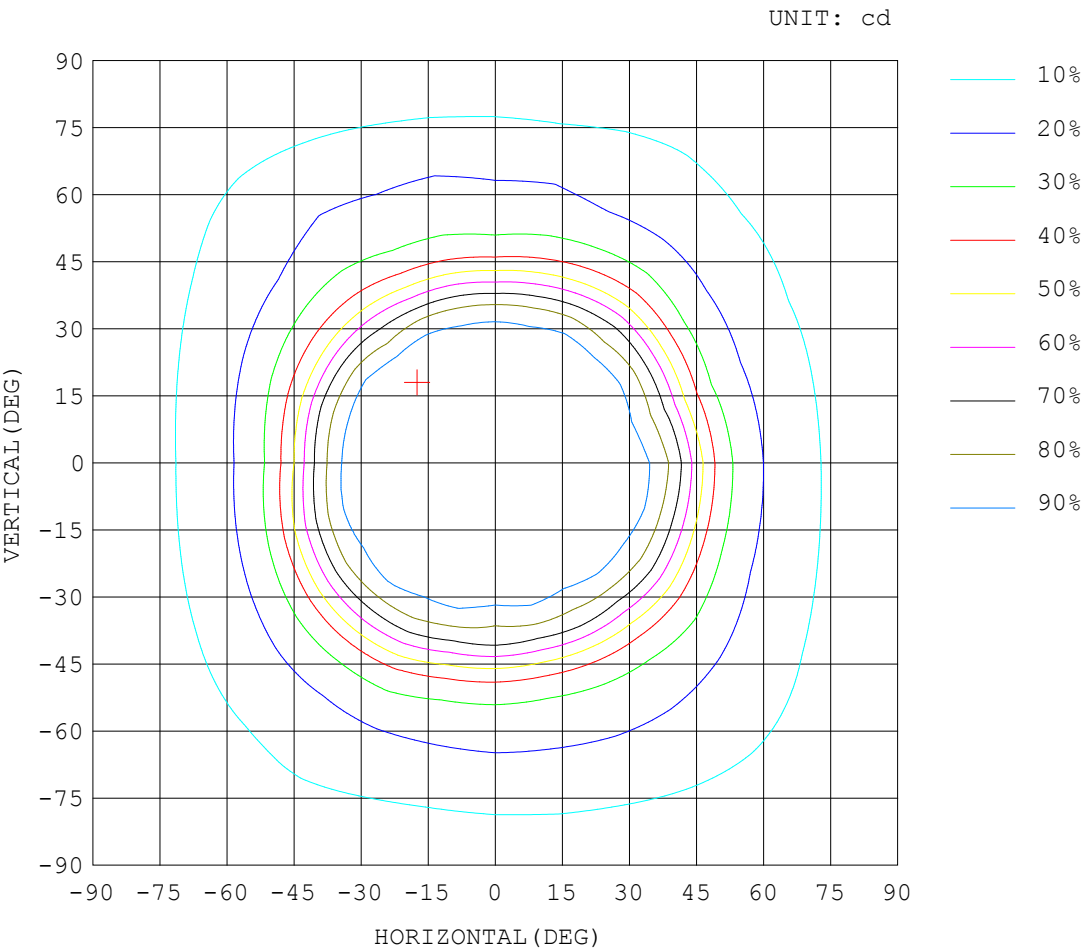
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

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-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

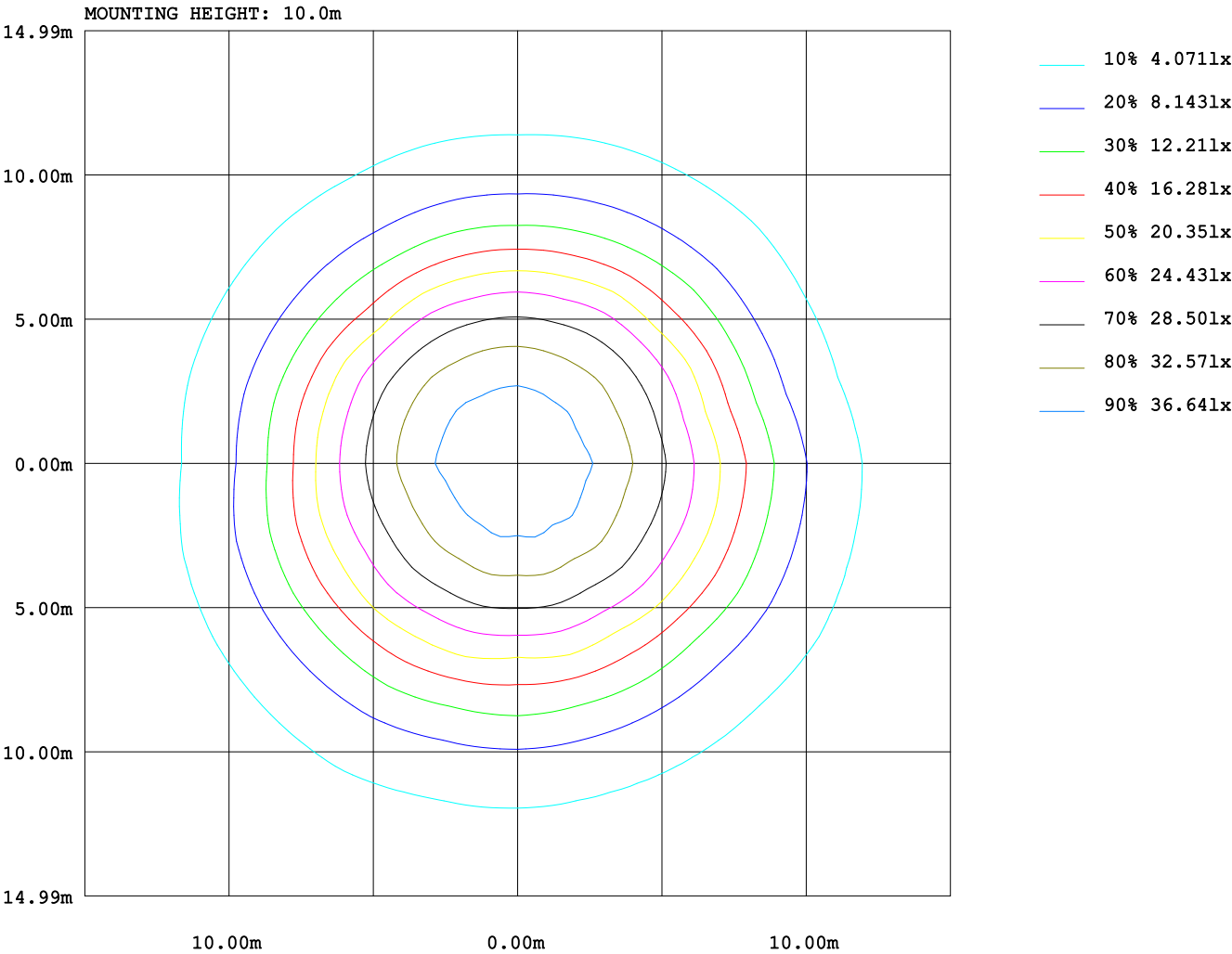
Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24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-RSL5S5-68N1WD-PM-00										TYPE:					WEIGHT:				
SPECIFICATION:										DIMENSION: 1438*65MM					SERIAL No.:				

		AREA FLUX DIAGRAM																UNIT:lm			Φ t	Φ a
		0.16	0.71	1.34	2.10	3.06	3.81	4.81	5.94	5.82	5.41	4.89	4.05	3.34	2.68	1.61	0.87	0.43	0.16	51.2	0.00	
VERTICAL (DEG)	90	0.20	1.00	2.18	4.00	6.63	9.55	12.3	14.5	15.3	14.7	13.0	11.0	8.45	5.77	3.28	1.71	0.77	0.21	125	67.0	
	80	0.24	1.35	3.50	7.36	11.9	16.4	20.3	23.6	24.3	23.7	21.8	17.5	13.6	9.61	5.43	2.77	1.14	0.27	205	185	
	70	0.27	1.72	4.95	9.51	15.5	22.1	27.0	31.7	33.4	33.1	30.7	24.9	18.5	12.7	7.56	3.86	1.53	0.32	280	267	
	60	0.31	2.06	5.85	11.0	19.1	28.9	38.2	48.6	55.5	55.8	49.8	39.1	27.2	16.7	9.67	4.87	1.91	0.37	415	406	
	50	0.34	2.32	6.59	13.2	24.5	41.6	65.2	87.6	99.4	99.5	89.4	67.8	41.3	22.0	11.9	5.82	2.25	0.41	682	674	
	40	0.36	2.52	7.25	15.7	32.0	62.9	95.3	116	122	122	116	95.4	61.6	29.3	14.2	6.83	2.54	0.45	903	897	
	30	0.37	2.63	7.71	17.5	40.5	81.7	111	122	124	123	119	108	77.9	38.0	16.7	7.76	2.78	0.48	1001	996	
	20	0.37	2.65	7.87	18.2	45.7	89.4	114	121	123	121	118	111	87.9	47.5	19.1	8.43	2.94	0.50	1038	1033	
	10	0.37	2.62	7.85	18.3	47.2	90.6	113	119	122	122	118	111	90.8	49.8	19.8	8.60	3.00	0.51	1045	1040	
	0	0.37	2.56	7.64	17.6	44.5	85.8	110	119	122	122	119	109	84.2	43.9	18.5	8.26	2.96	0.50	1018	1013	
	-10	0.35	2.41	7.09	15.7	35.8	72.3	102	117	122	121	115	98.9	68.9	35.0	16.5	7.61	2.84	0.48	941	935	
	-20	0.33	2.20	6.27	13.4	26.2	50.0	79.1	98.6	106	105	94.3	72.6	46.1	26.8	14.3	6.85	2.64	0.46	752	745	
	-30	0.30	1.93	5.33	10.9	19.1	31.2	47.3	60.2	67.4	66.3	56.4	42.8	30.3	20.6	11.9	6.15	2.37	0.42	481	473	
	-40	0.26	1.62	4.33	8.47	13.8	20.7	28.7	33.9	36.9	36.6	33.4	28.8	22.6	15.9	10.0	5.31	2.02	0.37	304	293	
	-50	0.22	1.28	3.34	6.33	10.2	14.3	18.8	22.5	24.9	25.3	23.6	20.7	16.7	12.1	7.81	3.96	1.62	0.33	215	196	
	-60	0.18	0.93	2.35	4.33	6.82	9.36	11.8	14.0	15.8	16.3	15.3	13.3	10.6	7.67	4.91	2.87	1.22	0.28	138	84.2	
-70	0.13	0.56	1.37	2.36	3.40	4.66	5.61	6.28	7.32	7.78	7.46	6.54	5.26	3.87	2.93	1.85	0.84	0.22	68.5	0.00		
-80																						
-90																						
		-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)				20	30	40	50	60	70	80	90	
Φ t	5.11	33.1	92.9	196	406	736	1006	1160	1227	1222	1144	983	716	400	197	94.4	35.8	6.74	10092			
Φ a	0.00	2.20	66.2	174	387	717	987	1142	1209	1204	1126	965	697	380	174	68.1	5.34	0.00		9306		

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

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

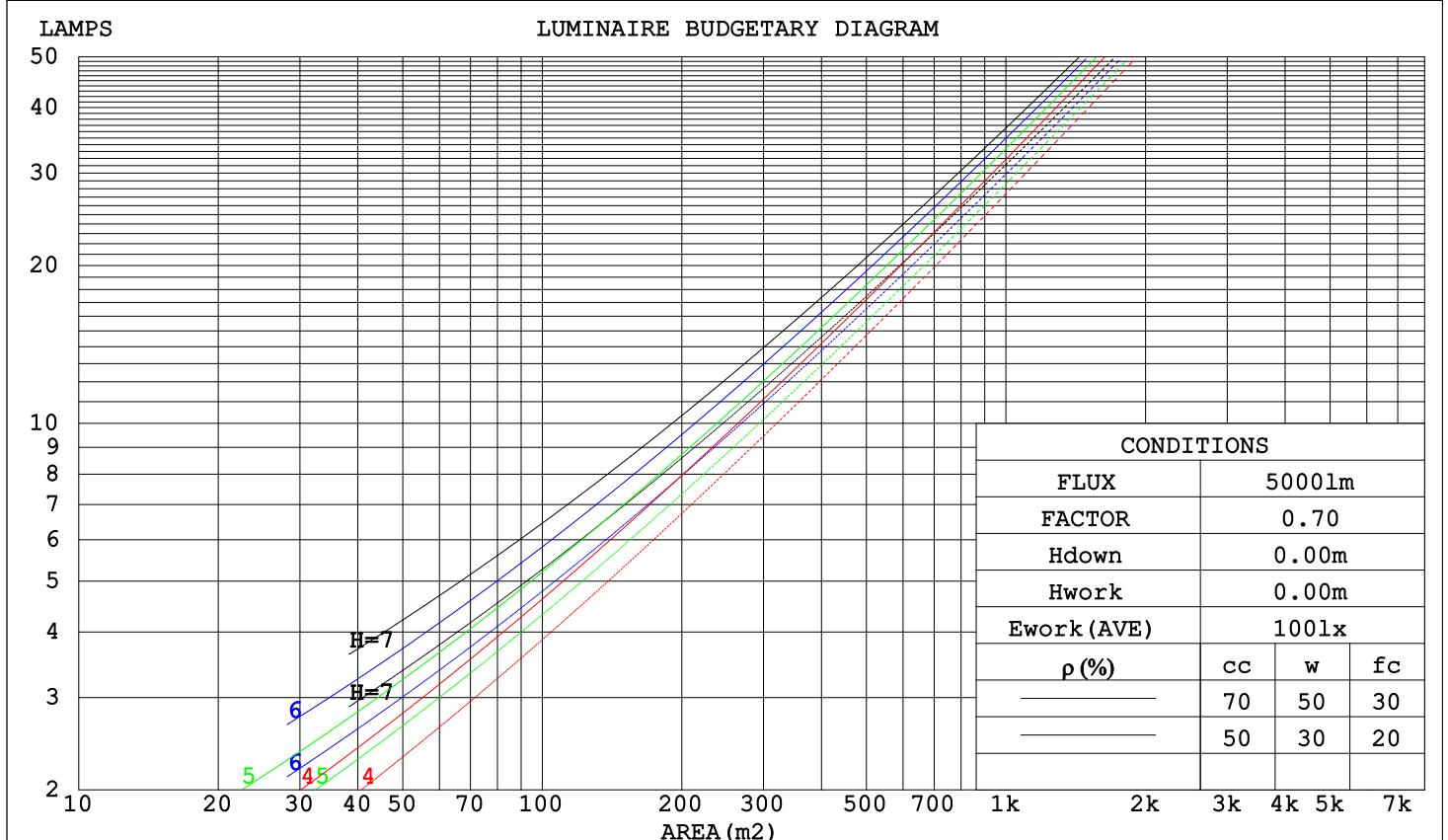
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

MANUFACTURER:															
Address:															
NAME: RE-RSL5S5-68N1WD-PM-00								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1438*65MM				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24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-RSL5S5-68N1WD-PM-00								TYPE:				WEIGHT:			
SPECIFICATION:								DIMENSION: 1438*65MM				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	.277	.158	.050	.269	.153	.049	.254	.145	.046	.239	.138	.044	.226	.131	.042	
2.0	.259	.142	.044	.252	.139	.043	.239	.133	.041	.226	.127	.040	.214	.121	.038	
3.0	.241	.128	.038	.235	.126	.038	.223	.121	.037	.212	.116	.036	.201	.111	.034	
4.0	.224	.117	.034	.219	.114	.034	.208	.110	.033	.198	.106	.032	.189	.102	.031	
5.0	.209	.106	.031	.204	.105	.030	.194	.101	.030	.185	.098	.029	.177	.095	.028	
6.0	.195	.098	.028	.191	.096	.028	.182	.093	.027	.174	.091	.027	.167	.088	.026	
7.0	.183	.091	.026	.179	.089	.025	.171	.087	.025	.164	.084	.024	.157	.082	.024	
8.0	.172	.084	.024	.169	.083	.023	.162	.081	.023	.155	.078	.023	.149	.076	.022	
9.0	.162	.079	.022	.159	.078	.022	.153	.076	.021	.147	.074	.021	.141	.072	.021	
10.0	.154	.074	.020	.151	.073	.020	.145	.071	.020	.139	.069	.020	.134	.067	.019	

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	.222	.222	.222	.190	.190	.190	.130	.130	.130	.074	.074	.074	.024	.024	.024	
1.0	.210	.188	.169	.180	.162	.145	.123	.111	.101	.071	.064	.058	.023	.021	.019	
2.0	.200	.164	.134	.171	.141	.116	.117	.098	.081	.068	.057	.047	.022	.018	.015	
3.0	.191	.146	.111	.164	.126	.096	.113	.088	.067	.065	.051	.040	.021	.017	.013	
4.0	.183	.133	.095	.157	.115	.082	.108	.080	.058	.063	.047	.034	.020	.015	.011	
5.0	.176	.122	.083	.151	.106	.072	.104	.074	.051	.060	.043	.030	.019	.014	.010	
6.0	.169	.114	.074	.145	.099	.065	.100	.069	.046	.058	.041	.027	.019	.013	.009	
7.0	.162	.107	.068	.140	.093	.059	.096	.065	.042	.056	.038	.025	.018	.013	.008	
8.0	.156	.101	.063	.135	.088	.055	.093	.062	.039	.054	.036	.023	.018	.012	.008	
9.0	.151	.096	.059	.130	.083	.052	.090	.059	.037	.052	.035	.022	.017	.011	.007	
10.0	.145	.092	.056	.125	.080	.049	.087	.056	.035	.051	.033	.021	.016	.011	.007	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月24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-RSL5S5-68N1WD-PM-00					TYPE:			WEIGHT:			
SPECIFICATION:					DIMENSION: 1438*65MM			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	22H	22.5	23.8	22.8	24.1	24.4	22.7	24.0	23.0	24.3	24.6
	3H	23.3	24.5	23.7	24.8	25.1	24.1	25.4	24.5	25.6	26.0
	4H	23.8	24.9	24.1	25.2	25.6	24.8	26.0	25.2	26.3	26.6
	6H	24.2	25.3	24.6	25.6	25.9	25.4	26.5	25.8	26.8	27.2
	8H	24.3	25.4	24.7	25.7	26.1	25.7	26.8	26.1	27.1	27.5
	12H	24.5	25.5	24.9	25.9	26.2	26.0	27.0	26.4	27.4	27.8
4H 2H	22H	22.9	24.0	23.3	24.4	24.7	23.1	24.3	23.5	24.6	24.9
	3H	24.1	25.1	24.5	25.4	25.8	24.8	25.8	25.2	26.2	26.6
	4H	24.7	25.6	25.1	26.0	26.4	25.7	26.6	26.1	27.0	27.4
	6H	25.2	26.0	25.7	26.5	26.9	26.4	27.2	26.9	27.7	28.1
	8H	25.5	26.2	25.9	26.7	27.1	26.9	27.6	27.3	28.0	28.5
	12H	25.7	26.4	26.2	26.8	27.3	27.2	27.9	27.7	28.4	28.9
8H 4H	24H	25.0	25.8	25.5	26.2	26.7	25.9	26.6	26.4	27.1	27.6
	6H	25.8	26.4	26.3	26.9	27.4	26.9	27.5	27.4	28.0	28.5
	8H	26.2	26.7	26.7	27.2	27.8	27.4	28.0	28.0	28.5	29.0
	12H	26.5	27.0	27.1	27.5	28.1	28.0	28.5	28.5	29.0	29.5
	12H 4H	25.1	25.8	25.6	26.2	26.7	25.9	26.6	26.4	27.1	27.5
6H	25.9	26.5	26.4	27.0	27.5	26.9	27.5	27.5	28.0	28.5	
8H	26.4	26.9	26.9	27.4	27.9	27.6	28.0	28.1	28.6	29.1	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.5					+ 0.2 / - 0.3					
1.5H	+ 0.5 / - 0.4					+ 0.3 / - 0.2					
2.0H	+ 0.8 / - 0.6					+ 0.4 / - 0.4					

CIE Pub.117 Corrected 10092 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.0)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月24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-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	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	54	48	63	54	48	62	53	47	42
0.80	74	63	57	72	63	57	71	62	56	50
1.00	81	71	65	80	71	65	77	71	64	57
1.25	87	78	72	86	77	71	83	76	70	64
1.50	92	83	77	90	82	76	87	80	75	68
2.00	97	90	84	95	89	83	92	86	81	74
2.50	101	94	88	98	92	87	94	89	85	77
3.00	103	97	92	101	96	91	97	92	89	80
4.00	107	102	98	104	100	96	100	96	93	83
5.00	109	105	101	106	102	99	101	98	95	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

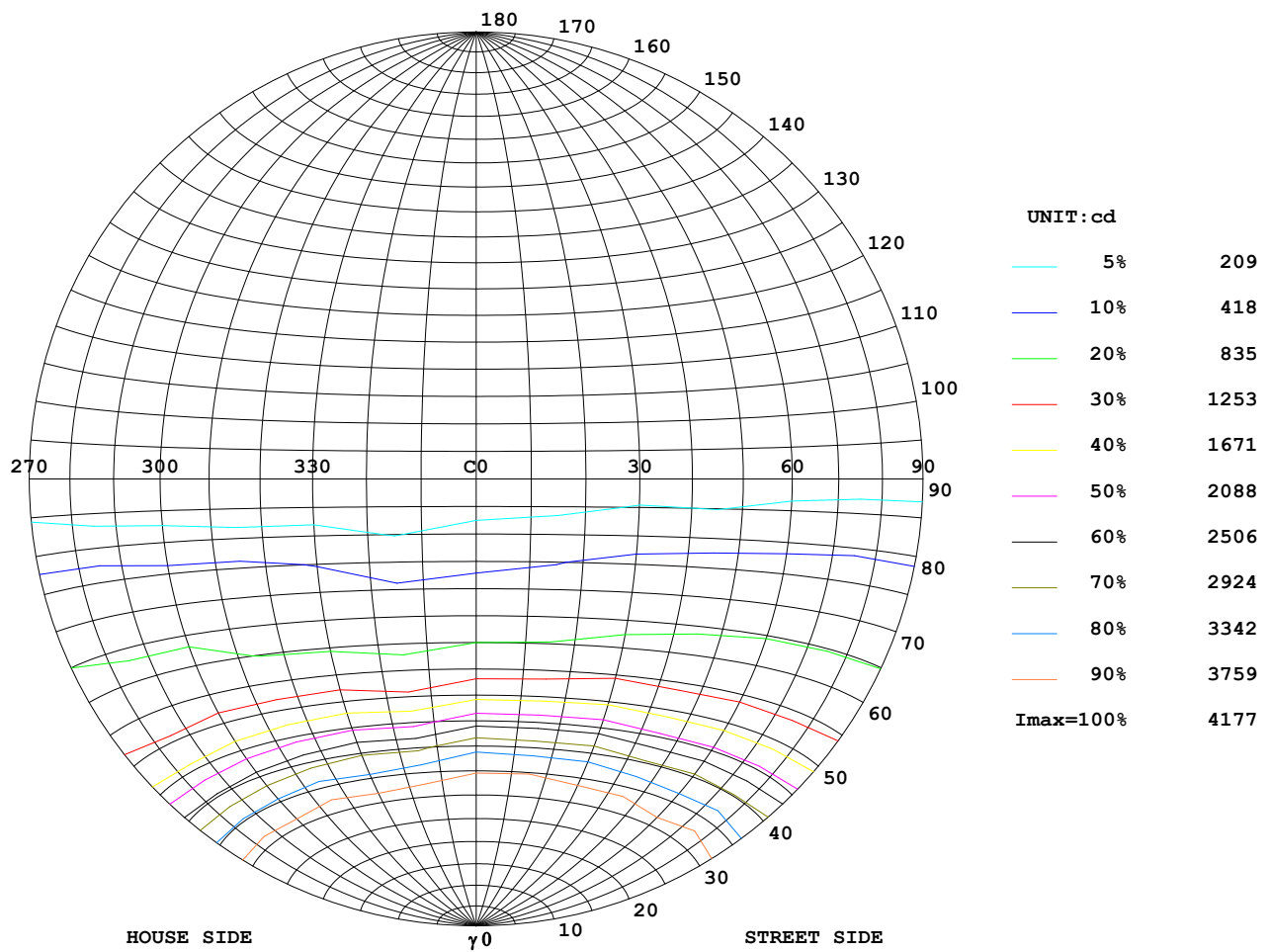
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2022年09月24日

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-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

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

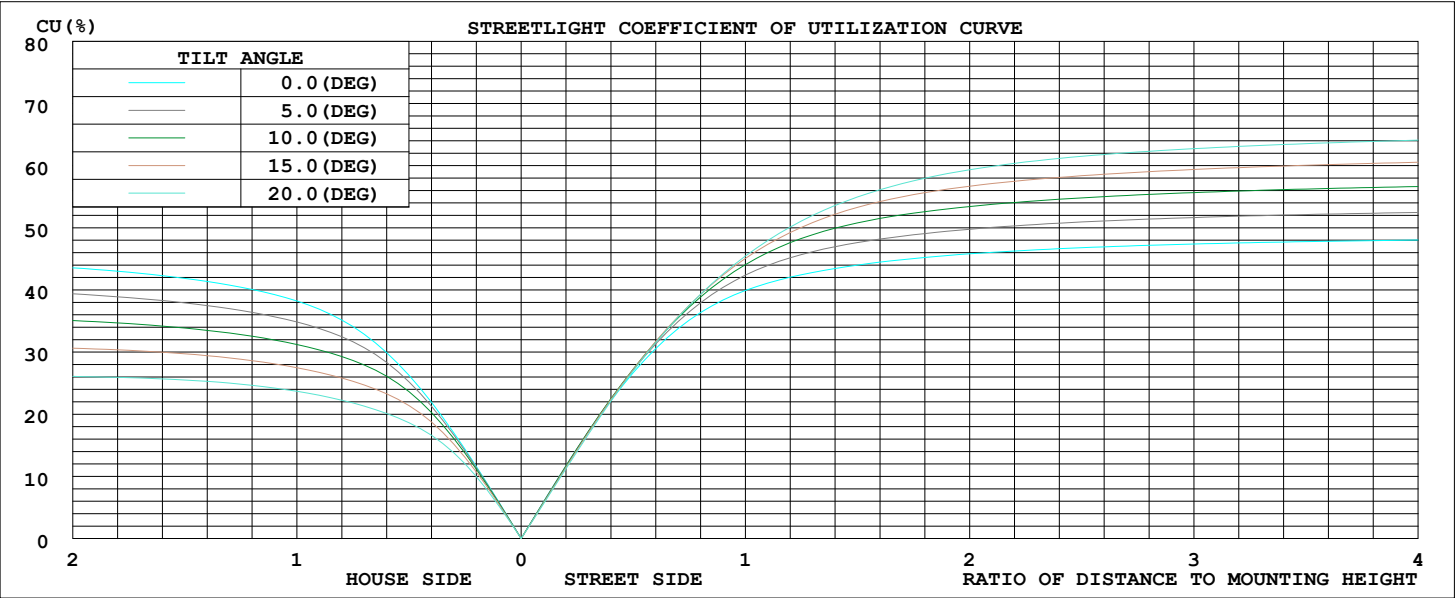
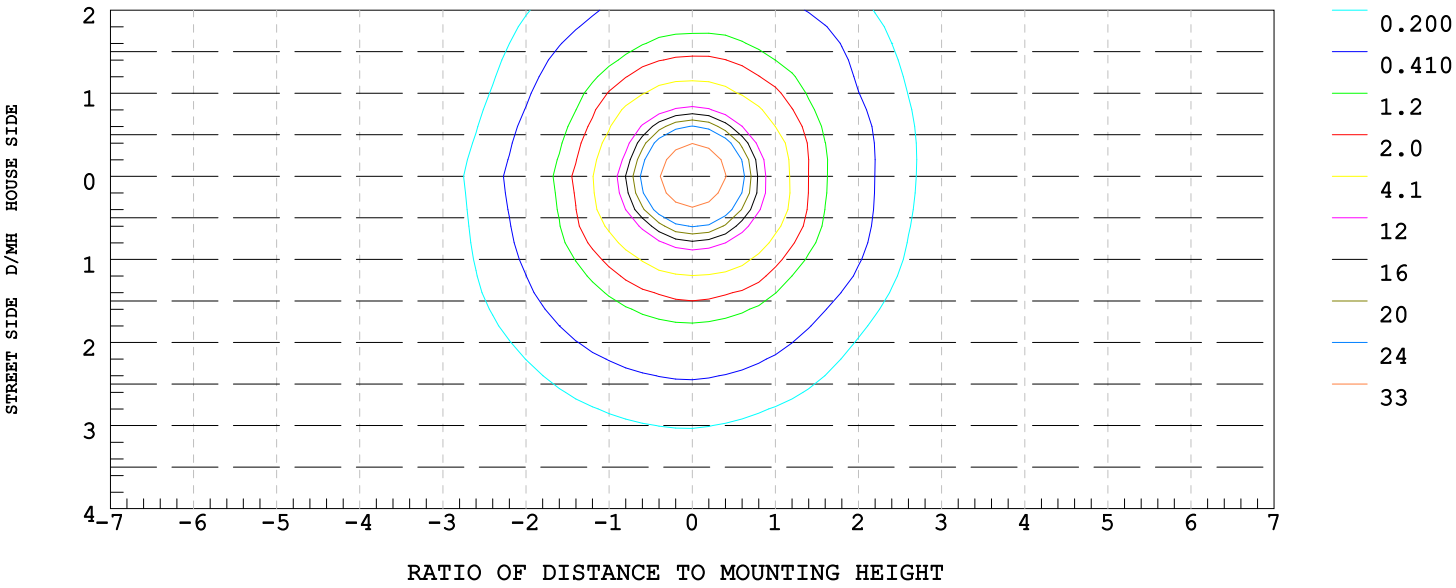
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:

ILLUMINANCE AT MH=10 m,Enadir = 40.72 lx



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

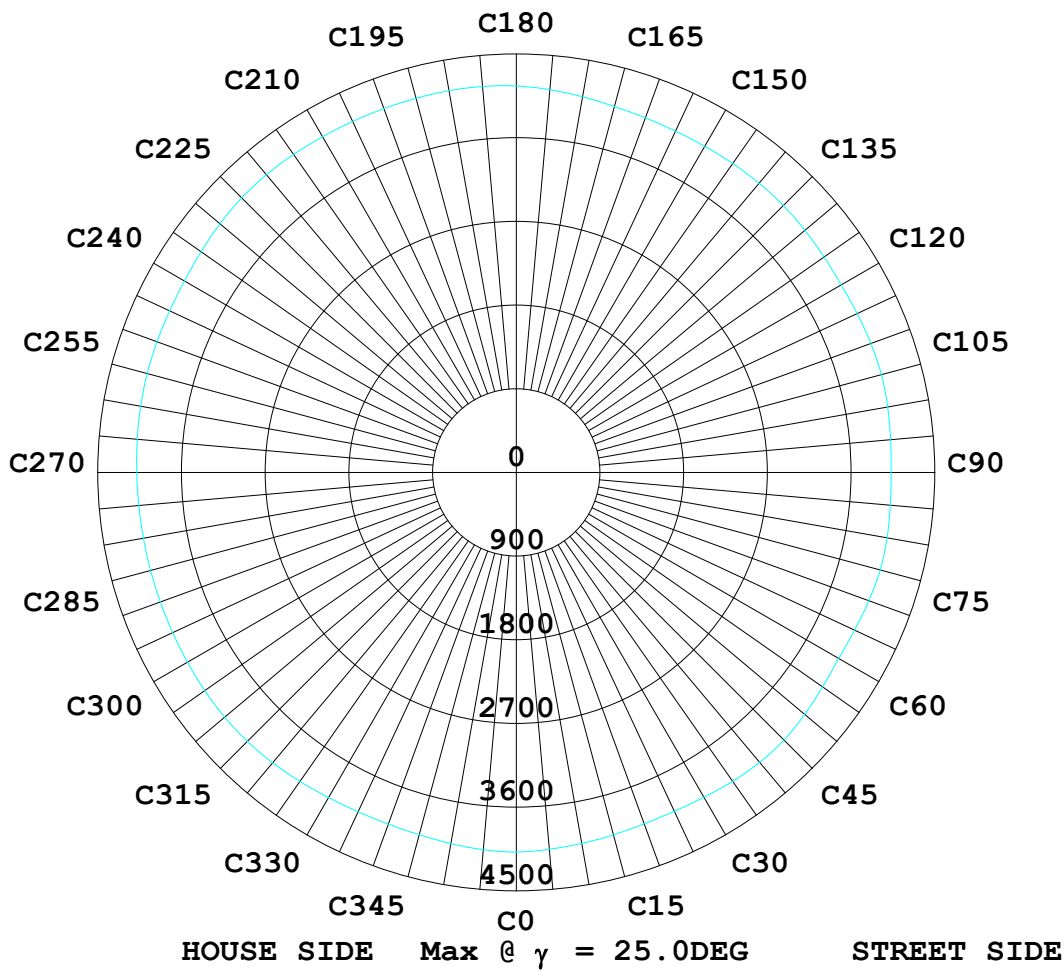
Test Set: 10.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:11.000 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER:		
Address:		
NAME: RE-RSL5S5-68N1WD-PM-00	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION: 1438*65MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2022年09月24日

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