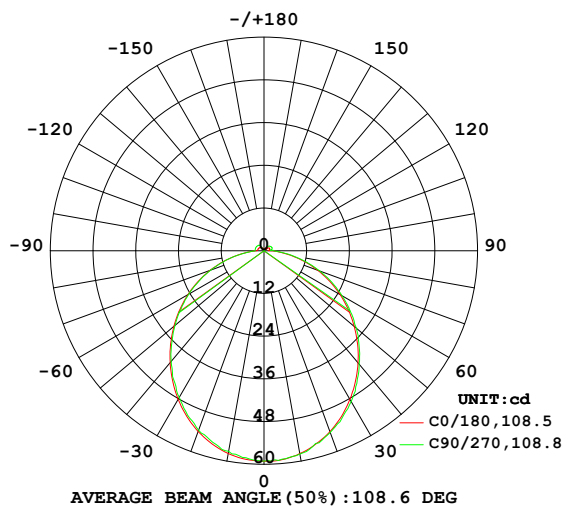


LUMINAIRE PHOTOMETRIC TEST REPORT

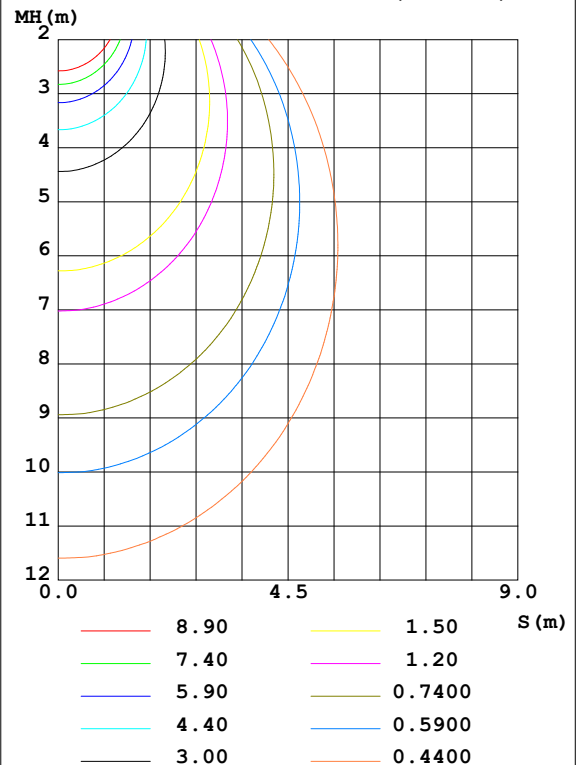
Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.131x1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.66 lm/W			
MODEL	L Type	I _{max} (cd)	59.13	S/MH (C0/180)	1.22
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)		TOTAL FLUX (lm)	176.13	η UP, DN (C0-180)	2.8, 47.4
NOMINAL FLUX (lm)	176.131	CIE CLASS	DIRECT	η UP, DN (C180-360)	3.1, 46.7
LAMPS INSIDE	1	η up (%)	5.9	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	94.1	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JZ
 Test Date: 2023-08-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

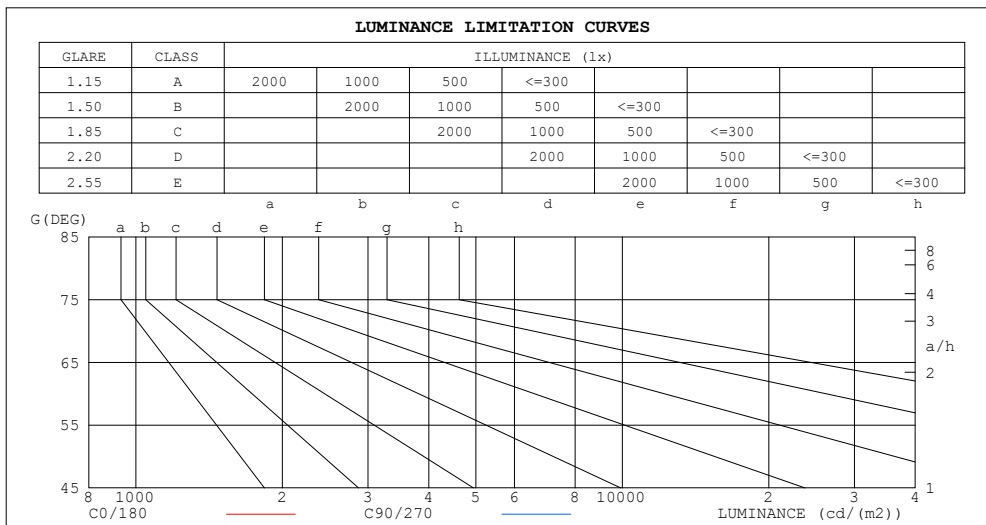
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	57.87	58.00	57.83	57.23					0- 10	5.576	5.576	3.17,3.17
20	54.10	54.36	54.05	53.68					10- 20	15.83	21.41	12.2,12.2
30	48.26	48.98	48.22	47.57					20- 30	23.65	45.06	25.6,25.6
40	41.11	41.59	41.04	40.56					30- 40	28.03	73.09	41.5,41.5
50	33.09	33.86	33.06	32.67					40- 50	28.71	101.8	57.8,57.8
60	24.71	25.32	24.70	24.43					50- 60	25.94	127.7	72.5,72.5
70	16.08	16.67	16.12	15.93					60- 70	20.29	148.0	84,84
80	7.731	8.196	7.837	7.691					70- 80	12.62	160.6	91.2,91.2
90	2.269	2.709	2.350	2.563					80- 90	5.103	165.7	94.1,94.1
100	1.601	2.121	1.774	2.508					90-100	2.229	168.0	95.4,95.4
110	1.738	2.480	1.729	2.500					100-110	2.199	170.2	96.6,96.6
120	1.656	2.303	1.589	2.426					110-120	2.050	172.2	97.8,97.8
130	1.205	2.069	1.440	2.279					120-130	1.622	173.8	98.7,98.7
140	1.380	0.9574	1.182	2.082					130-140	1.277	175.1	99.4,99.4
150	0.8998	0.3332	0.9482	0.2713					140-150	0.6472	175.8	99.8,99.8
160	0.5300	0.2953	0.6277	0.2525					150-160	0.2403	176.0	99.9,99.9
170	0.3572	0.2810	0.2956	0.2489					160-170	0.1038	176.1	100,100
180	0.2956	0.2710	0.2833	0.2463					170-180	0.0271	176.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.131x1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	49261	53911
80	44519	47200
75	45532	47611
70	47018	48735
65	48284	49790
60	49430	50630
55	50541	51482
50	51482	52677
45	52596	53463

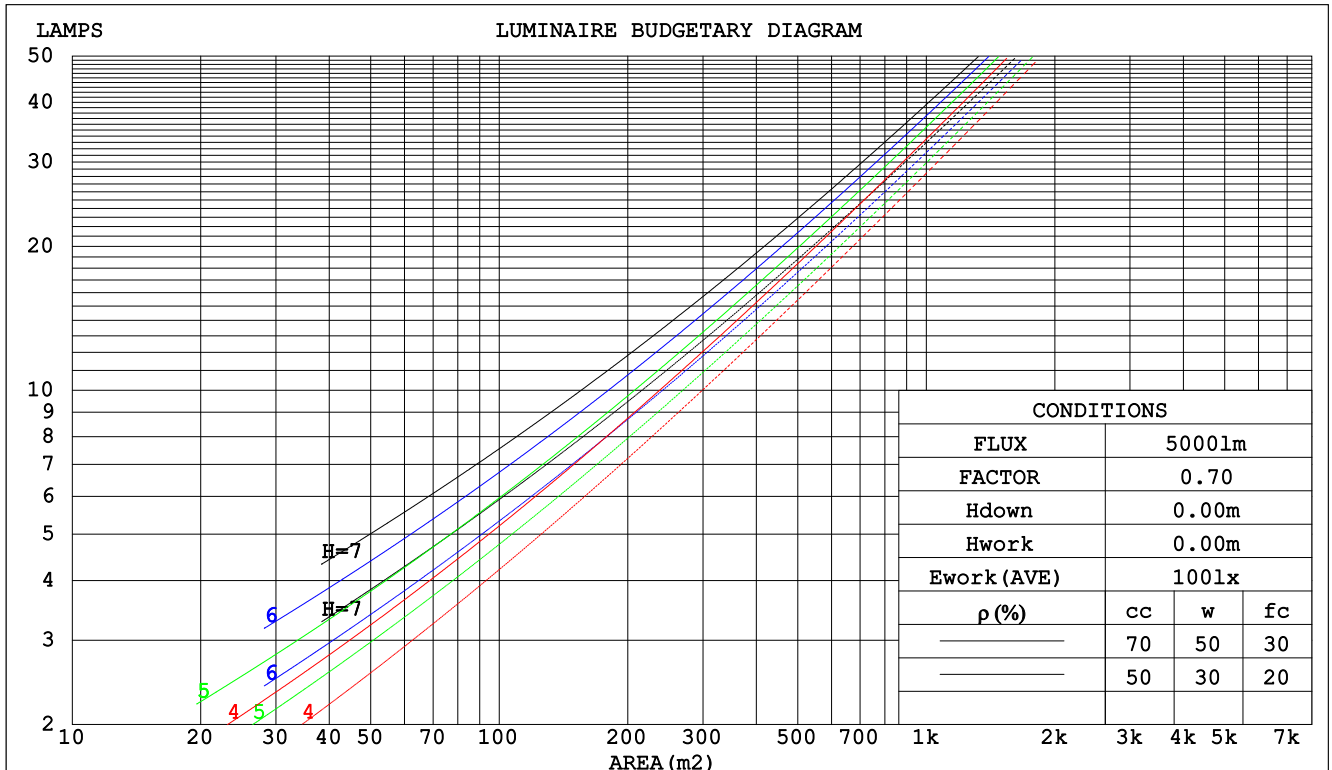
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.13lx1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

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						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1.0	1.02	.97	.93	.99	.95	.91	.94	.90	.87	.89	.86	.84	.84	.82	.80	.78
2.0	.89	.82	.76	.86	.80	.74	.82	.76	.72	.78	.73	.69	.74	.70	.67	.64
3.0	.78	.69	.63	.76	.68	.62	.72	.65	.60	.68	.63	.58	.65	.60	.57	.54
4.0	.69	.60	.53	.67	.59	.52	.64	.57	.51	.61	.55	.50	.58	.53	.49	.46
5.0	.61	.52	.46	.60	.52	.45	.57	.50	.44	.55	.48	.43	.52	.47	.42	.40
6.0	.55	.46	.40	.54	.46	.39	.52	.44	.39	.49	.43	.38	.47	.42	.37	.35
7.0	.50	.41	.35	.49	.41	.35	.47	.40	.34	.45	.38	.34	.43	.37	.33	.31
8.0	.46	.37	.31	.45	.37	.31	.43	.36	.31	.41	.35	.30	.40	.34	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.32	.28	.38	.32	.27	.37	.31	.27	.25
10.0	.39	.31	.26	.38	.30	.25	.37	.30	.25	.35	.29	.25	.34	.28	.24	.22



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz		
Lamp Flux:176.131x1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

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	.320	.182	.058	.311	.178	.056	.295	.169	.054	.279	.161	.052	.265	.154	.050	
2.0	.296	.162	.050	.288	.159	.049	.273	.152	.047	.259	.145	.046	.247	.140	.044	
3.0	.271	.144	.043	.264	.142	.043	.251	.136	.041	.239	.131	.040	.227	.126	.039	
4.0	.249	.130	.038	.243	.127	.038	.231	.123	.037	.220	.118	.036	.210	.114	.035	
5.0	.230	.117	.034	.224	.115	.034	.214	.111	.033	.204	.107	.032	.194	.104	.031	
6.0	.213	.107	.031	.208	.105	.030	.198	.102	.030	.189	.098	.029	.181	.095	.028	
7.0	.198	.098	.028	.193	.096	.027	.184	.093	.027	.176	.090	.026	.169	.088	.026	
8.0	.185	.090	.025	.180	.089	.025	.173	.086	.025	.165	.084	.024	.158	.081	.024	
9.0	.173	.084	.023	.169	.082	.023	.162	.080	.023	.155	.078	.022	.149	.076	.022	
10.0	.162	.078	.022	.159	.077	.021	.152	.075	.021	.146	.073	.021	.140	.071	.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	.235	.235	.235	.201	.201	.201	.137	.137	.137	.079	.079	.079	.025	.025	.025	
1.0	.226	.201	.179	.194	.173	.154	.132	.119	.106	.076	.069	.062	.024	.022	.020	
2.0	.218	.178	.143	.187	.153	.124	.128	.106	.086	.074	.062	.051	.024	.020	.016	
3.0	.211	.160	.120	.181	.138	.104	.124	.096	.073	.072	.056	.043	.023	.018	.014	
4.0	.203	.147	.104	.174	.127	.091	.120	.089	.064	.069	.052	.038	.022	.017	.012	
5.0	.196	.137	.093	.168	.118	.081	.116	.083	.057	.067	.049	.034	.022	.016	.011	
6.0	.188	.129	.086	.162	.111	.075	.112	.078	.053	.065	.046	.031	.021	.015	.010	
7.0	.182	.122	.080	.156	.106	.070	.108	.074	.049	.063	.044	.029	.020	.014	.010	
8.0	.175	.116	.075	.151	.101	.066	.104	.071	.047	.061	.042	.028	.020	.014	.009	
9.0	.169	.111	.072	.146	.096	.063	.101	.068	.045	.059	.040	.027	.019	.013	.009	
10.0	.163	.107	.069	.141	.093	.060	.098	.065	.043	.057	.039	.026	.018	.013	.009	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz										
Lamp Flux:176.13lx1 lm										
NAME: RIBDC-RL-35K-AM					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: RAYHIL					SUR.: 0.01*0.1			Shielding Angle:		
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	32.2	33.6	32.5	33.9	34.2	32.2	33.7	32.6	34.0	34.3
3H	33.7	35.1	34.1	35.4	35.8	33.9	35.2	34.3	35.5	35.9
4H	34.4	35.7	34.8	36.1	36.4	34.6	35.8	35.0	36.2	36.6
6H	35.0	36.2	35.4	36.5	36.9	35.2	36.3	35.6	36.7	37.1
8H	35.2	36.3	35.6	36.7	37.1	35.4	36.5	35.8	36.9	37.3
12H	35.4	36.5	35.8	36.9	37.3	35.6	36.7	36.0	37.1	37.5
4H 2H	32.8	34.0	33.2	34.4	34.8	32.8	34.1	33.2	34.5	34.8
3H	34.6	35.7	35.0	36.1	36.5	34.7	35.8	35.1	36.2	36.6
4H	35.4	36.4	35.8	36.8	37.3	35.5	36.5	36.0	36.9	37.4
6H	36.1	37.0	36.6	37.4	37.9	36.2	37.1	36.7	37.6	38.1
8H	36.3	37.2	36.8	37.7	38.2	36.5	37.4	37.0	37.8	38.3
12H	36.6	37.4	37.1	37.8	38.4	36.8	37.6	37.3	38.1	38.6
8H 4H	35.7	36.5	36.2	37.0	37.5	35.8	36.6	36.3	37.1	37.6
6H	36.6	37.2	37.1	37.8	38.3	36.7	37.4	37.2	37.9	38.5
8H	36.9	37.6	37.5	38.1	38.7	37.1	37.7	37.7	38.3	38.8
12H	37.3	37.8	37.9	38.4	39.0	37.5	38.0	38.1	38.6	39.2
12H 4H	35.7	36.5	36.2	37.0	37.5	35.8	36.6	36.3	37.1	37.6
6H	36.6	37.3	37.2	37.8	38.4	36.8	37.4	37.3	37.9	38.5
8H	37.1	37.6	37.7	38.2	38.8	37.2	37.8	37.8	38.3	38.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 176.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -6.0)
Area: 0.001 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.131x1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

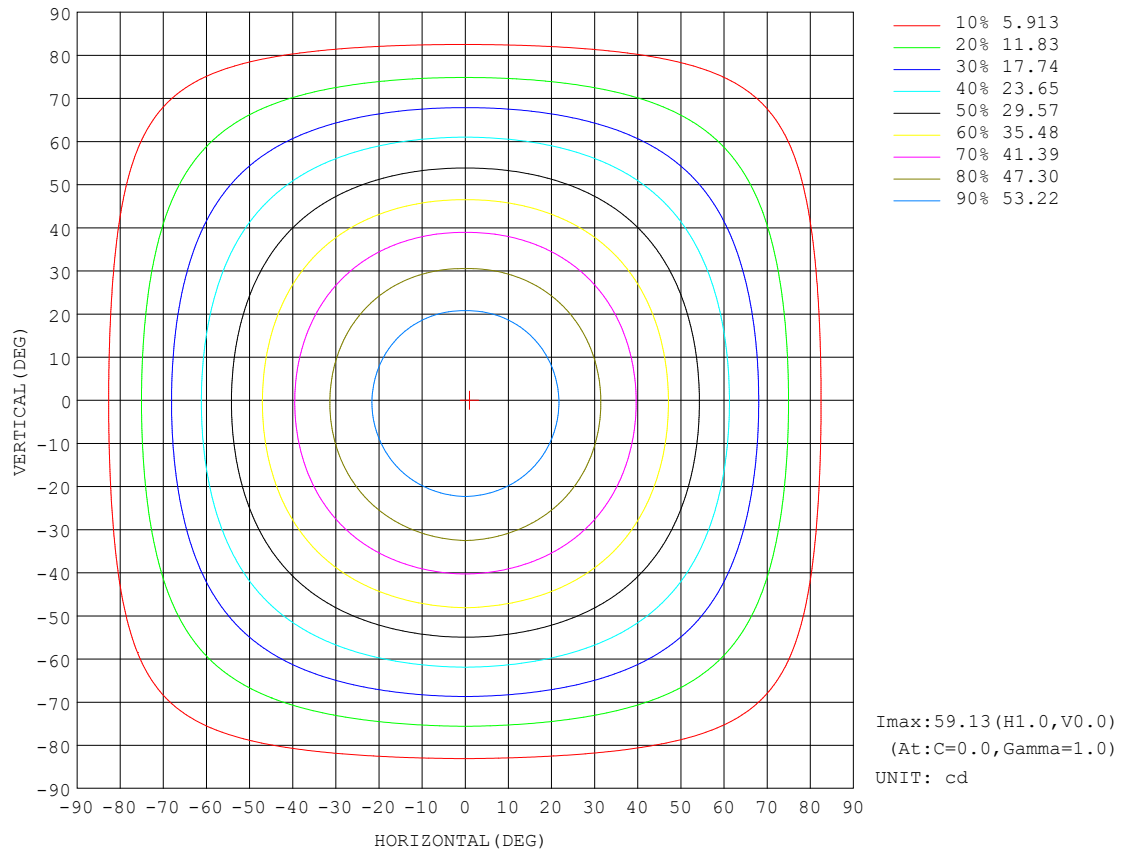
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	56	44	37	55	44	37	53	43	37	30
0.80	65	54	46	64	53	46	62	52	45	38
1.00	74	62	55	72	61	54	69	62	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	80	72	66	57
2.00	92	83	77	90	82	76	86	79	74	65
2.50	96	88	82	94	86	81	89	83	78	68
3.00	100	92	87	97	91	85	92	87	82	72
4.00	104	98	93	101	96	91	96	91	88	77
5.00	106	101	97	103	99	95	98	94	91	80
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.13lx1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

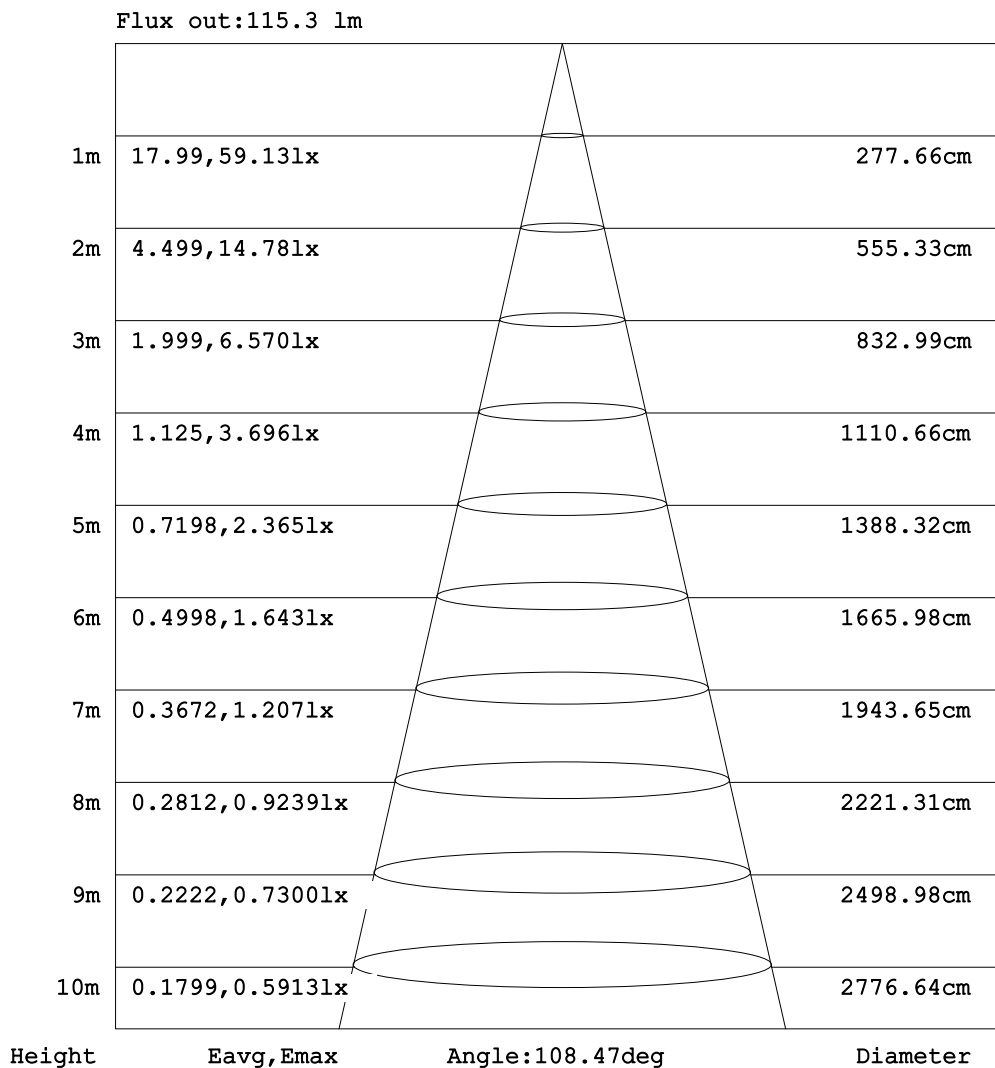


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.13lx1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:



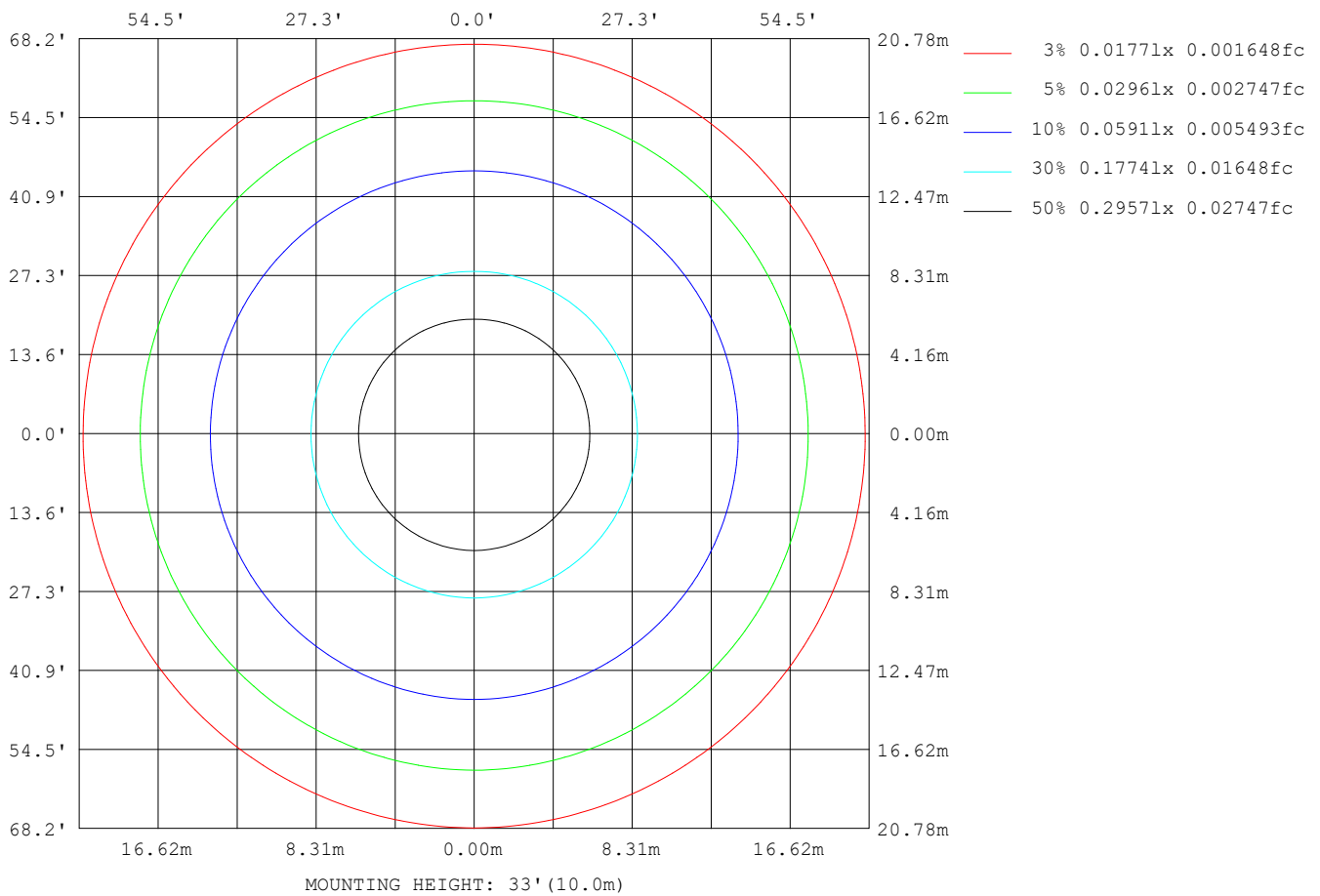
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.13lx1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.131x1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

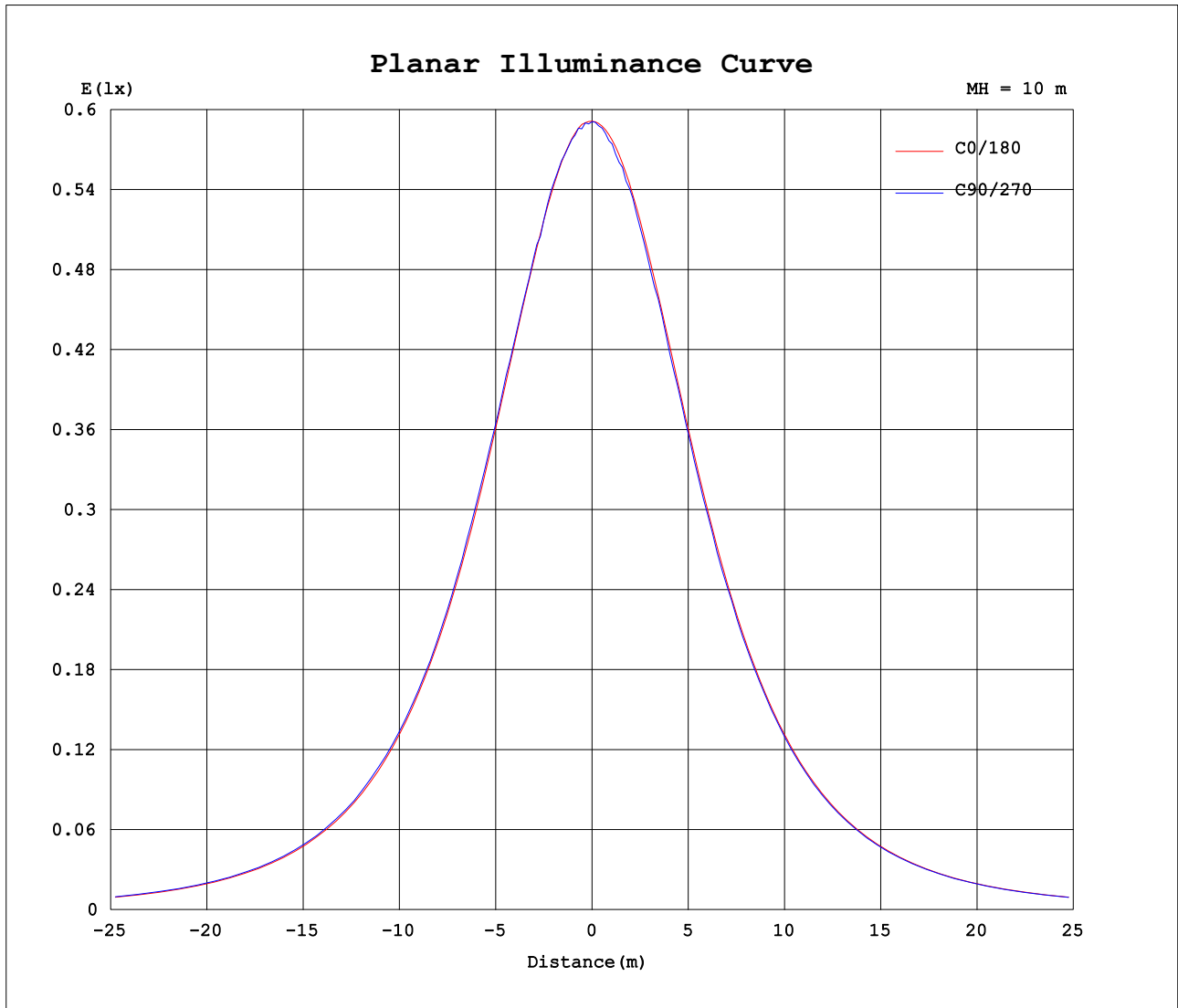
AvgL	cd/m2
L_0~180 (65) av	48276
L_0~180 (75) av	45710
L_0~180 (85) av	50030
L_90~270 (65) av	48713
L_90~270 (75) av	46376
L_90~270 (85) av	51717
L_45 (65) av	48549
L_45 (75) av	46137
L_45 (85) av	51133

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JZ
 Test Date: 2023-08-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.001V I:0.0945A P:2.2681W PF:1.0000 Freq:0Hz Lamp Flux:176.131x1 lm		
NAME: RIBDC-RL-35K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.1	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270														
0	59.1	59.1	59.1	59.1														
5	58.9	58.8	58.8	58.3														
10	57.9	58.0	57.8	57.2														
15	56.3	56.0	56.2	55.7														
20	54.1	54.4	54.1	53.7														
25	51.4	51.9	51.3	50.9														
30	48.3	49.0	48.2	47.6														
35	44.8	45.5	44.7	44.2														
40	41.1	41.6	41.0	40.6														
45	37.2	37.8	37.1	36.7														
50	33.1	33.9	33.1	32.7														
55	29.0	29.5	28.9	28.5														
60	24.7	25.3	24.7	24.4														
65	20.4	21.0	20.4	20.1														
70	16.1	16.7	16.1	15.9														
75	11.8	12.3	11.9	11.7														
80	7.73	8.20	7.84	7.69														
85	4.29	4.70	4.43	4.32														
90	2.27	2.71	2.35	2.56														
95	1.35	1.76	1.82	2.50														
100	1.60	2.12	1.77	2.51														
105	1.72	2.38	1.75	2.51														
110	1.74	2.48	1.73	2.50														
115	1.74	2.36	1.66	2.46														
120	1.66	2.30	1.59	2.43														
125	0.99	2.18	1.53	2.36														
130	1.20	2.07	1.44	2.28														
135	1.36	1.87	1.32	2.19														
140	1.38	0.96	1.18	2.08														
145	1.27	0.46	1.06	1.33														
150	0.90	0.33	0.95	0.27														
155	0.68	0.30	0.78	0.25														
160	0.53	0.30	0.63	0.25														
165	0.43	0.29	0.43	0.25														
170	0.36	0.28	0.30	0.25														
175	0.31	0.27	0.29	0.25														
180	0.30	0.27	0.28	0.25														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-08-08

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
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