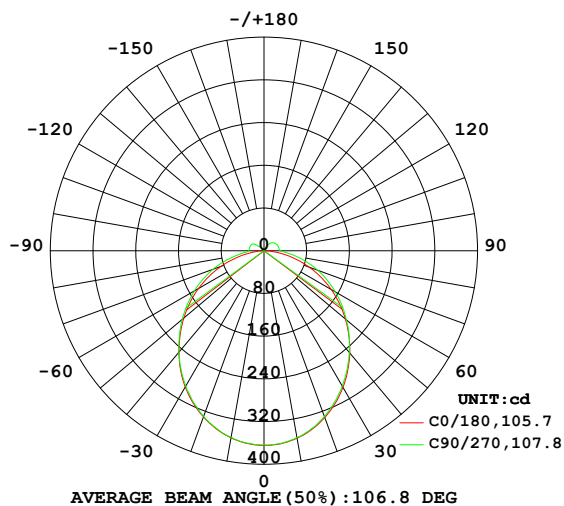


## LUMINAIRE PHOTOMETRIC TEST REPORT

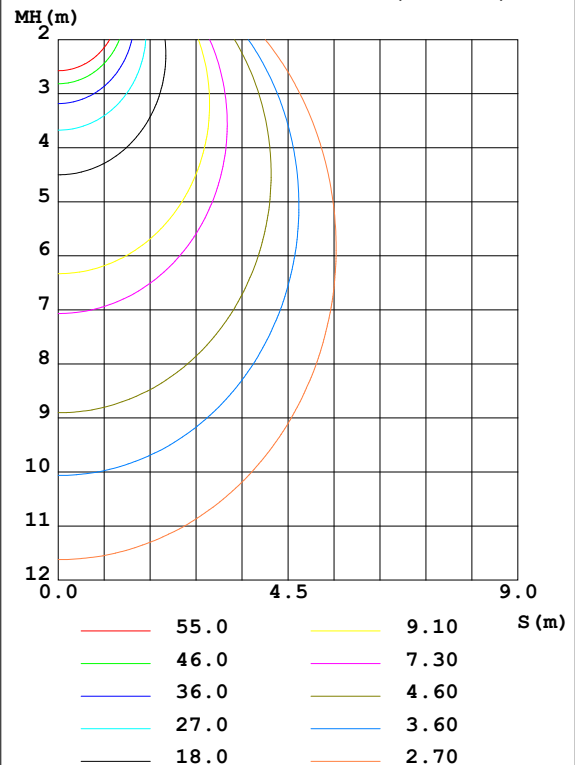
Test:U:24.001V I:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 86.98 lm/W			
MODEL		I <sub>max</sub> (cd)	364.6	S/MH (C0/180)	1.21
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)		TOTAL FLUX (lm)	1066.5	η UP, DN (C0-180)	3.4, 47.4
NOMINAL FLUX (lm)	1066.51	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.8, 46.4
LAMPS INSIDE	1	η up (%)	6.3	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	93.7	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:

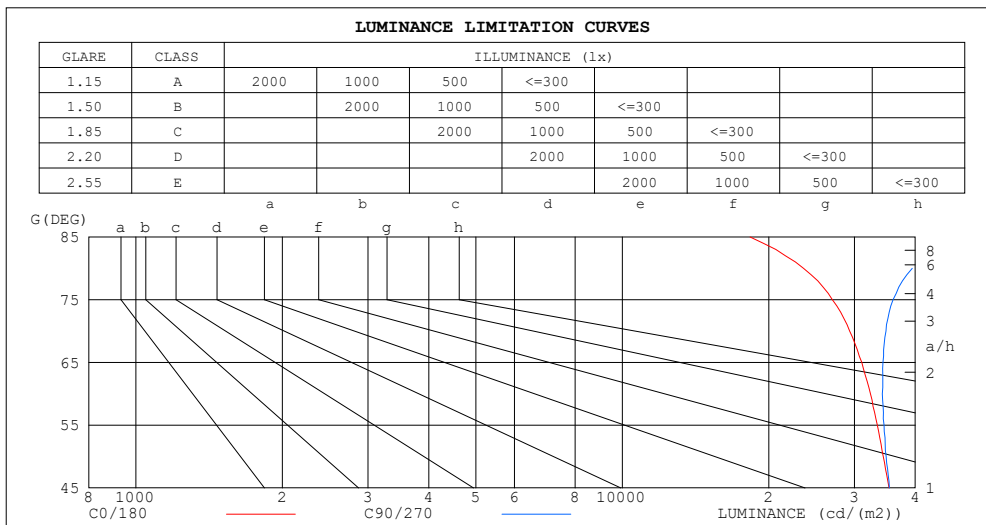
$\gamma$	C0	C90	C180	C270					$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	356.5	355.3	355.9	354.7					0- 10	34.36	34.36	3.22,3.22
20	332.6	330.8	331.1	330.1					10- 20	97.33	131.7	12.3,12.3
30	295.4	293.0	295.1	292.9					20- 30	144.5	276.2	25.9,25.9
40	249.9	248.5	247.8	248.2					30- 40	170.2	446.4	41.9,41.9
50	198.9	201.6	195.9	199.7					40- 50	172.9	619.4	58.1,58.1
60	145.6	154.1	142.1	150.6					50- 60	155.4	774.8	72.6,72.6
70	90.31	107.3	85.78	101.4					60- 70	120.9	895.6	84,84
80	36.86	61.63	31.61	53.67					70- 80	74.47	970.1	91,91
90	0.9286	30.50	0.5047	28.51					80- 90	29.72	999.8	93.7,93.7
100	0.3785	28.41	0.4806	27.93					90-100	15.82	1016	95.2,95.2
110	0.5296	27.78	0.6653	27.26					100-110	15.03	1031	96.6,96.6
120	0.7511	26.07	0.8624	25.45					110-120	13.62	1044	97.9,97.9
130	0.9604	23.32	1.084	13.88					120-130	10.68	1055	98.9,98.9
140	1.206	19.07	1.269	4.330					130-140	6.317	1061	99.5,99.5
150	1.355	10.68	1.441	1.410					140-150	3.126	1064	99.8,99.8
160	1.510	4.454	1.601	1.490					150-160	1.384	1066	99.9,99.9
170	1.613	1.810	1.700	1.613					160-170	0.5423	1066	100,100
180	1.749	1.749	1.737	1.737					170-180	0.1617	1067	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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18307	54270
80	23582	39437
75	27025	36020
70	29339	34844
65	31060	34347
60	32355	34236
55	33440	34525
50	34384	34847
45	35332	35387

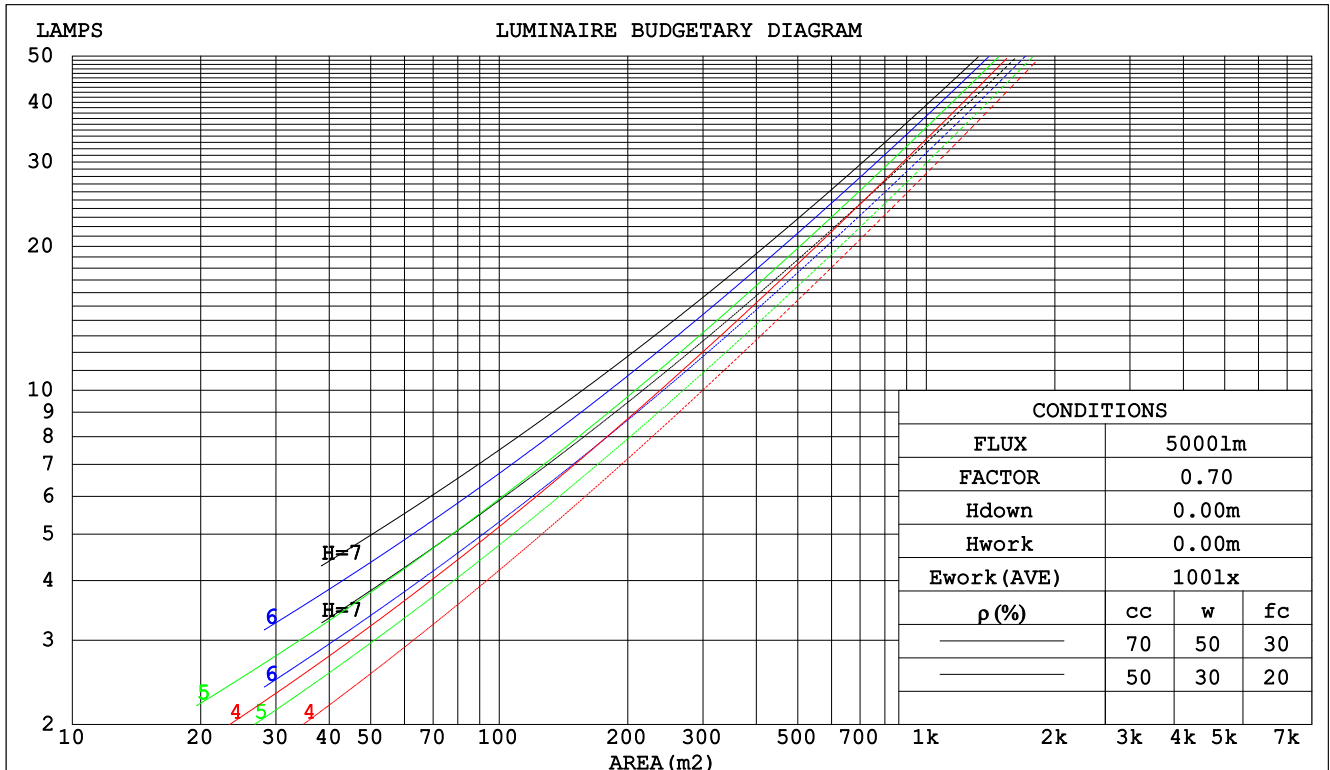
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JZ  
Test Date:2023-08-08

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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.5lx1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	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	.96	.96	.96	.94
1.0	1.02	.98	.94	.99	.95	.91	.94	.90	.87	.89	.86	.84	.84	.82	.80	.78
2.0	.89	.82	.76	.86	.80	.75	.82	.76	.72	.78	.73	.69	.74	.70	.67	.64
3.0	.78	.70	.63	.76	.68	.62	.72	.66	.60	.68	.63	.58	.65	.61	.57	.54
4.0	.69	.60	.53	.67	.59	.53	.64	.57	.51	.61	.55	.50	.58	.53	.49	.46
5.0	.62	.53	.46	.60	.52	.45	.57	.50	.44	.55	.48	.43	.52	.47	.42	.40
6.0	.56	.47	.40	.54	.46	.40	.52	.44	.39	.50	.43	.38	.47	.42	.37	.35
7.0	.50	.42	.35	.49	.41	.35	.47	.40	.34	.45	.39	.34	.43	.38	.33	.31
8.0	.46	.37	.32	.45	.37	.31	.43	.36	.31	.41	.35	.30	.40	.34	.30	.28
9.0	.42	.34	.28	.41	.34	.28	.40	.33	.28	.38	.32	.27	.37	.31	.27	.25
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.35	.29	.25	.34	.29	.24	.23



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:0.5109A P:12.262W PF:1.0000 Freq:0Hz		
Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	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	.318	.181	.057	.309	.176	.056	.292	.167	.053	.276	.159	.051	.262	.152	.049		
2.0	.294	.161	.049	.286	.157	.048	.271	.150	.047	.257	.144	.045	.244	.138	.044		
3.0	.270	.144	.043	.263	.141	.042	.249	.135	.041	.237	.130	.040	.225	.125	.039		
4.0	.248	.129	.038	.242	.126	.037	.230	.122	.036	.218	.117	.035	.208	.113	.034		
5.0	.229	.117	.034	.223	.114	.033	.212	.110	.033	.202	.107	.032	.193	.103	.031		
6.0	.212	.106	.030	.207	.104	.030	.197	.101	.029	.188	.098	.029	.179	.094	.028		
7.0	.197	.097	.028	.192	.096	.027	.183	.093	.027	.175	.090	.026	.167	.087	.026		
8.0	.184	.090	.025	.180	.088	.025	.172	.086	.024	.164	.083	.024	.157	.081	.023		
9.0	.172	.083	.023	.168	.082	.023	.161	.080	.023	.154	.077	.022	.148	.075	.022		
10.0	.162	.078	.022	.158	.076	.021	.152	.074	.021	.145	.072	.021	.139	.070	.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	.238	.238	.238	.204	.204	.204	.139	.139	.139	.080	.080	.080	.026	.026	.026	
1.0	.229	.204	.182	.196	.175	.156	.134	.121	.108	.077	.070	.063	.025	.022	.020	
2.0	.221	.180	.146	.189	.155	.126	.130	.107	.088	.075	.062	.052	.024	.020	.017	
3.0	.213	.163	.123	.183	.141	.107	.125	.098	.075	.072	.057	.044	.023	.019	.014	
4.0	.205	.150	.107	.176	.129	.093	.121	.090	.066	.070	.053	.039	.023	.017	.013	
5.0	.198	.140	.096	.170	.121	.084	.117	.084	.059	.068	.050	.035	.022	.016	.012	
6.0	.191	.131	.089	.164	.114	.077	.113	.080	.055	.066	.047	.032	.021	.015	.011	
7.0	.184	.124	.083	.158	.108	.072	.109	.076	.051	.064	.045	.030	.021	.015	.010	
8.0	.178	.119	.078	.153	.103	.068	.106	.072	.048	.062	.043	.029	.020	.014	.010	
9.0	.171	.114	.075	.148	.099	.065	.102	.069	.046	.060	.041	.028	.019	.013	.009	
10.0	.166	.110	.072	.143	.095	.063	.099	.067	.045	.058	.040	.027	.019	.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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm											
NAME: RIBDC-35-40K-AM					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.: RAYHIL					SUR.: 0.01*0.9			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	24.4	25.8	24.8	26.1	26.5	24.6	26.0	24.9	26.3	26.6	
	3H	25.9	27.2	26.3	27.6	27.9	26.3	27.6	26.7	28.0	28.4
	4H	26.5	27.8	26.9	28.1	28.5	27.1	28.4	27.5	28.8	29.1
	6H	26.9	28.1	27.3	28.5	28.9	27.9	29.1	28.3	29.5	29.9
	8H	27.0	28.2	27.5	28.6	29.0	28.3	29.4	28.7	29.8	30.2
	12H	27.1	28.2	27.5	28.6	29.0	28.6	29.7	29.1	30.1	30.6
4H	2H	25.0	26.3	25.4	26.7	27.0	25.2	26.4	25.6	26.8	27.2
	3H	26.7	27.8	27.2	28.2	28.7	27.1	28.2	27.6	28.6	29.0
	4H	27.5	28.5	27.9	28.9	29.4	28.1	29.1	28.5	29.5	30.0
	6H	28.0	28.9	28.5	29.4	29.9	29.0	29.9	29.5	30.3	30.8
	8H	28.2	29.0	28.7	29.5	30.0	29.4	30.2	29.9	30.7	31.2
	12H	28.3	29.1	28.8	29.6	30.1	29.9	30.6	30.4	31.1	31.7
8H	4H	27.8	28.6	28.3	29.1	29.6	28.3	29.2	28.8	29.6	30.2
	6H	28.6	29.2	29.1	29.8	30.3	29.4	30.1	30.0	30.6	31.2
	8H	28.8	29.4	29.4	30.0	30.6	30.0	30.6	30.6	31.2	31.7
	12H	29.0	29.6	29.6	30.1	30.7	30.6	31.2	31.2	31.7	32.3
12H	4H	27.9	28.6	28.4	29.1	29.7	28.4	29.1	28.9	29.6	30.1
	6H	28.7	29.3	29.2	29.8	30.4	29.5	30.1	30.1	30.7	31.2
	8H	29.0	29.5	29.6	30.1	30.7	30.1	30.7	30.7	31.2	31.8
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, 1067 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)  
Area: 0.009 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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.5lx1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:

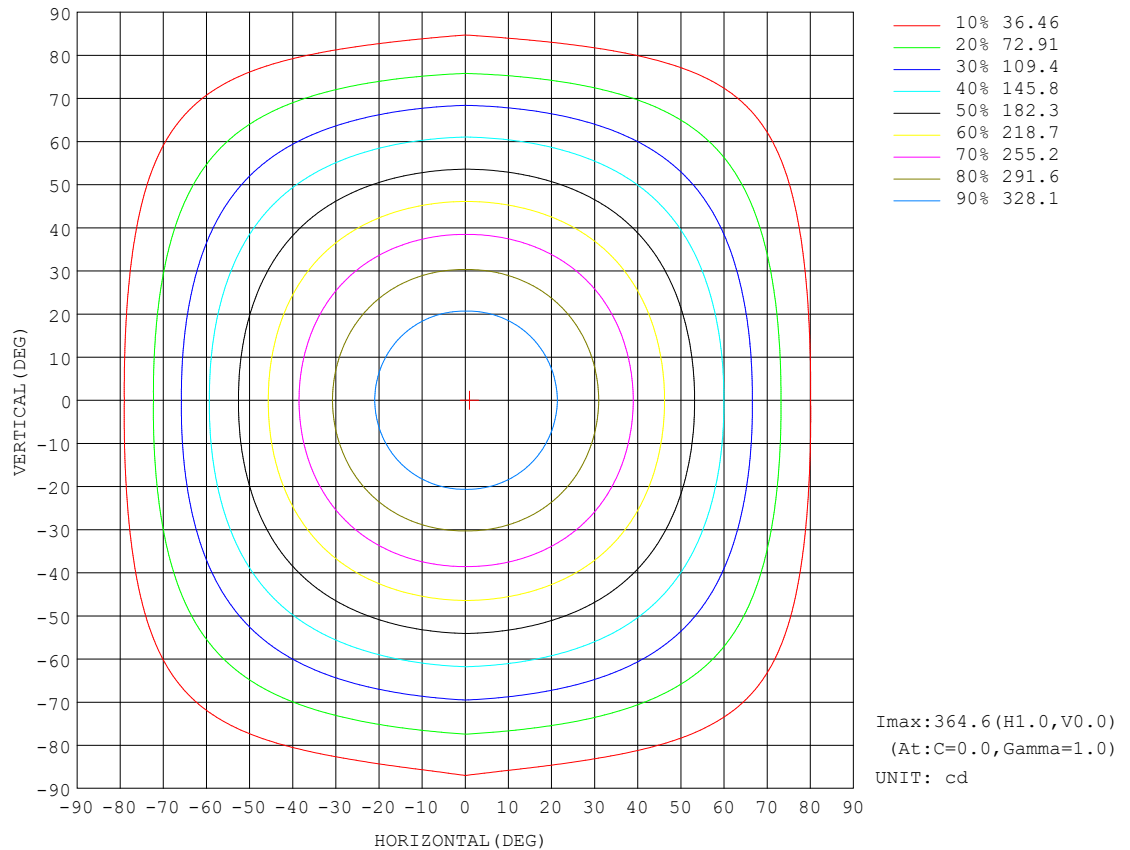
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT)    k(RI) x RCR = 5									
k = 0.60	56	44	37	55	44	37	53	43	37	30
0.80	66	54	46	64	53	46	62	52	46	38
1.00	74	62	55	72	62	55	70	63	54	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	80	72	66	58
2.00	92	83	77	90	82	76	86	79	74	65
2.50	96	88	82	94	86	81	89	83	78	69
3.00	100	93	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										

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:



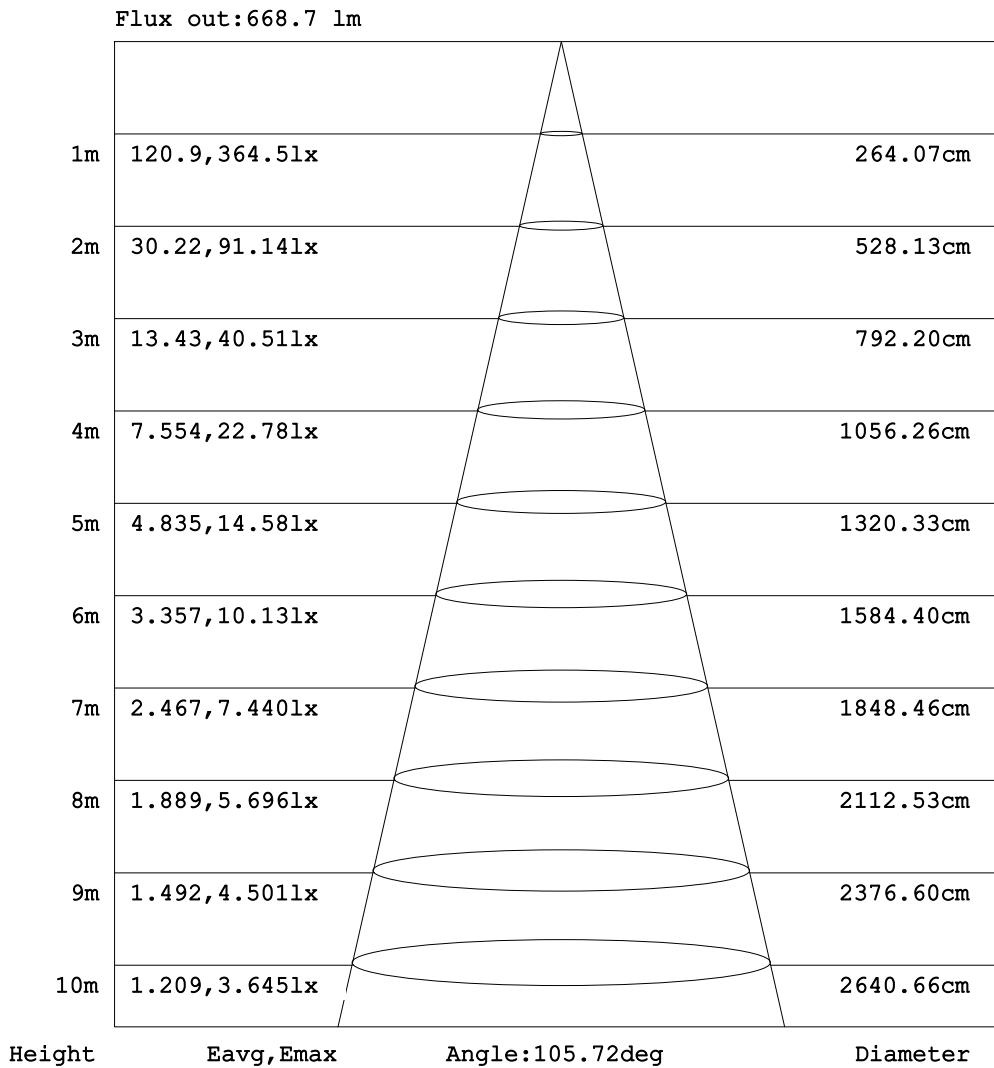
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JZ  
Test Date:2023-08-08

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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:



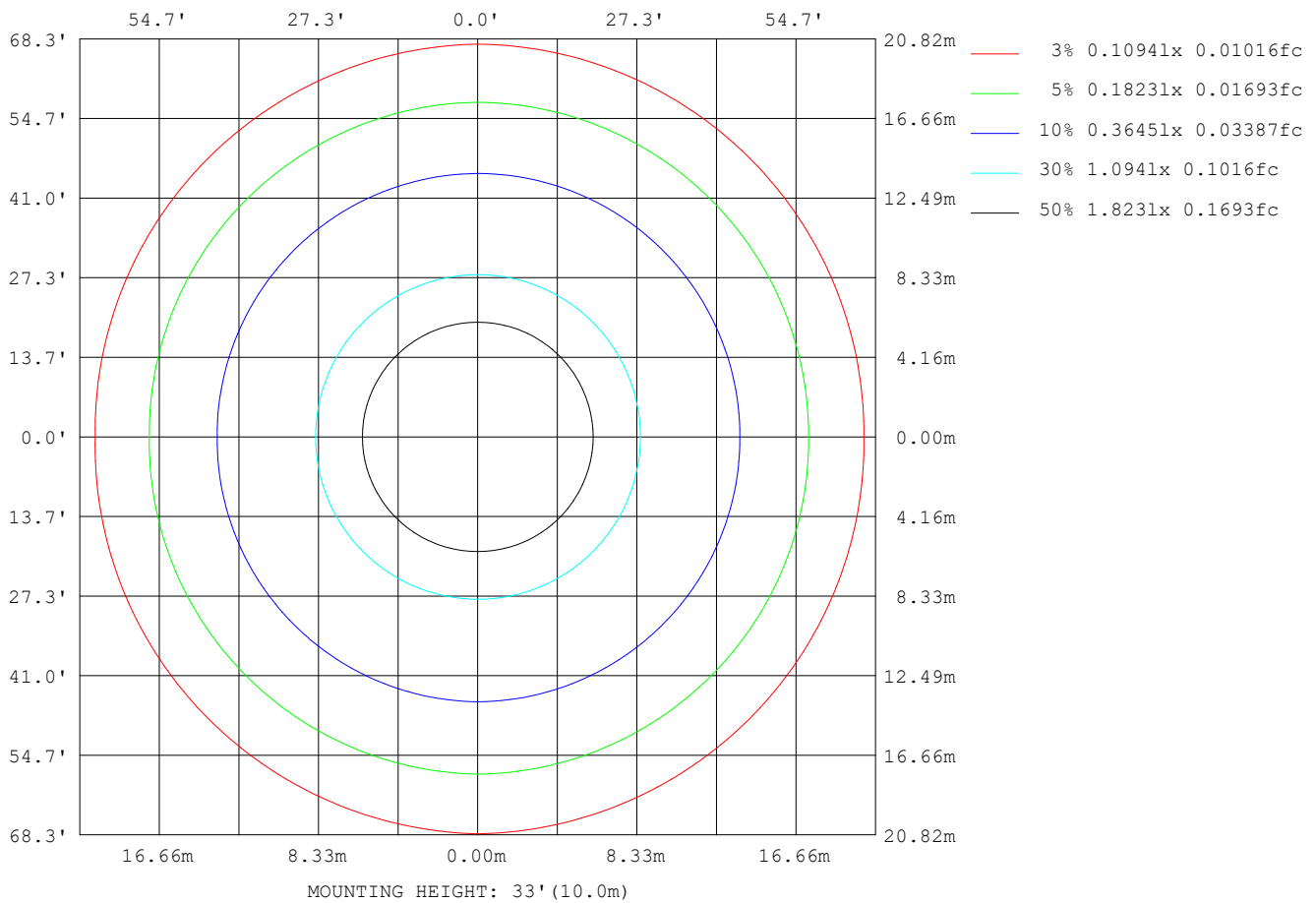
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.51x1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:

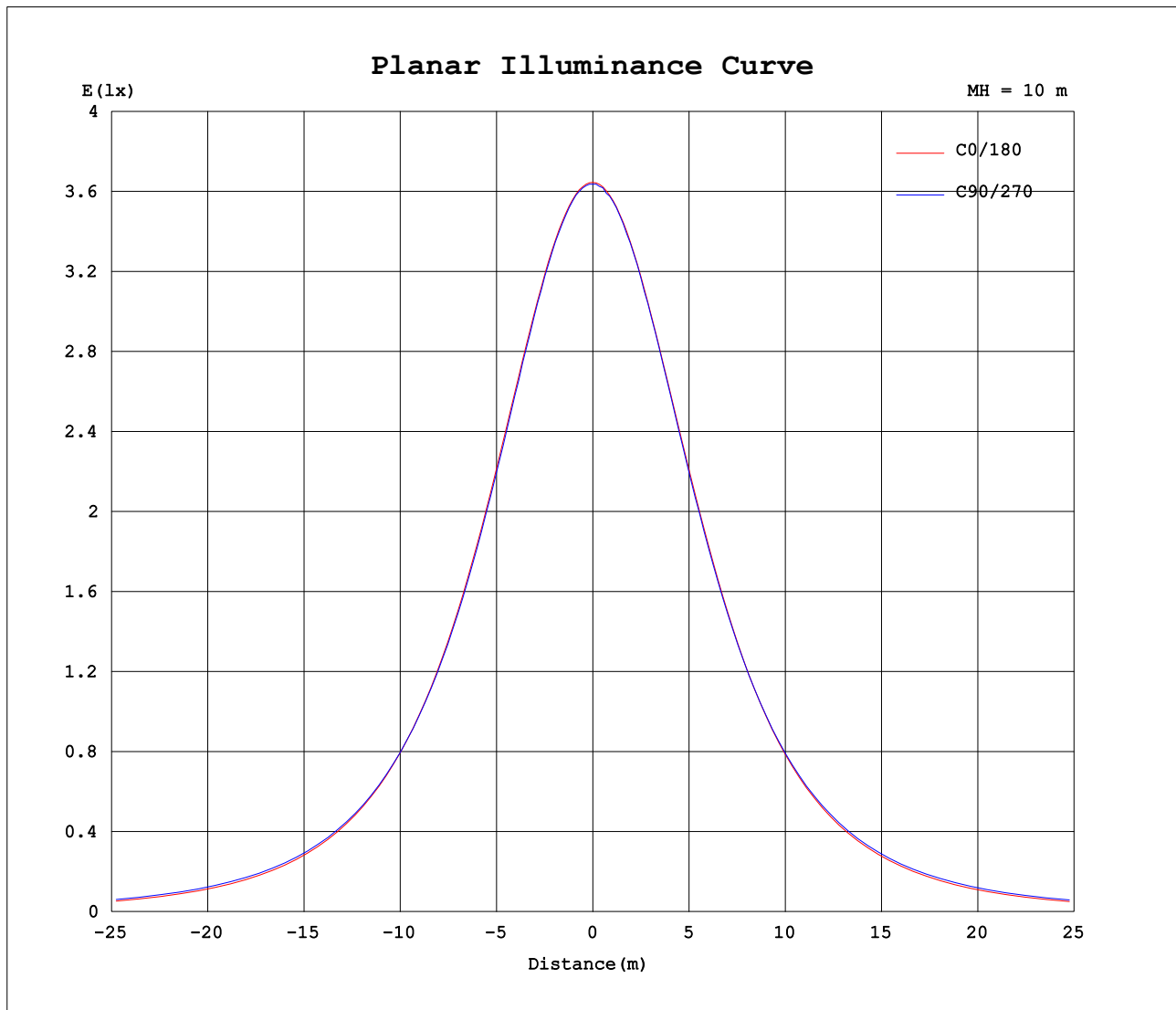
AvgL	cd/m2
L_0~180 (65) av	30476
L_0~180 (75) av	25939
L_0~180 (85) av	15588
L_90~270 (65) av	33706
L_90~270 (75) av	34521
L_90~270 (85) av	49672
L_45 (65) av	32458
L_45 (75) av	31235
L_45 (85) av	36721

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.5109A P:12.262W PF:1.0000 Freq:0Hz Lamp Flux:1066.5lx1 lm		
NAME: RIBDC-35-40K-AM	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAYHIL	SUR.: 0.01*0.9	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	365	364	365	364															
5	363	362	362	362															
10	357	355	356	355															
15	346	345	345	344															
20	333	331	331	330															
25	315	312	314	313															
30	295	293	295	293															
35	274	271	273	271															
40	250	249	248	248															
45	225	225	222	224															
50	199	202	196	200															
55	173	178	169	175															
60	146	154	142	151															
65	118	131	114	126															
70	90.3	107	85.8	101															
75	63.0	83.9	57.9	76.9															
80	36.9	61.6	31.6	53.7															
85	14.4	42.6	10.1	35.4															
90	0.93	30.5	0.50	28.5															
95	0.37	28.7	0.46	28.1															
100	0.38	28.4	0.48	27.9															
105	0.43	28.2	0.57	27.6															
110	0.53	27.8	0.67	27.3															
115	0.62	27.0	0.76	26.5															
120	0.75	26.1	0.86	25.4															
125	0.87	24.8	0.97	21.9															
130	0.96	23.3	1.08	13.9															
135	1.08	21.5	1.17	8.43															
140	1.21	19.1	1.27	4.33															
145	1.28	14.7	1.37	1.84															
150	1.35	10.7	1.44	1.41															
155	1.51	7.15	1.53	1.43															
160	1.51	4.45	1.60	1.49															
165	1.55	2.71	1.66	1.55															
170	1.61	1.81	1.70	1.61															
175	1.67	1.74	1.73	1.70															
180	1.75	1.75	1.74	1.74															

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: