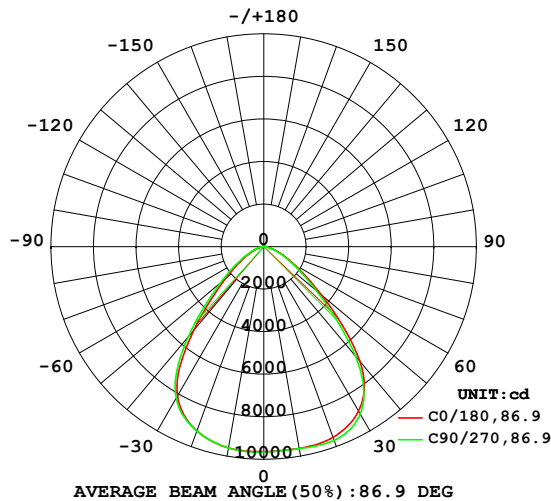


LUMINAIRE PHOTOMETRIC TEST REPORT

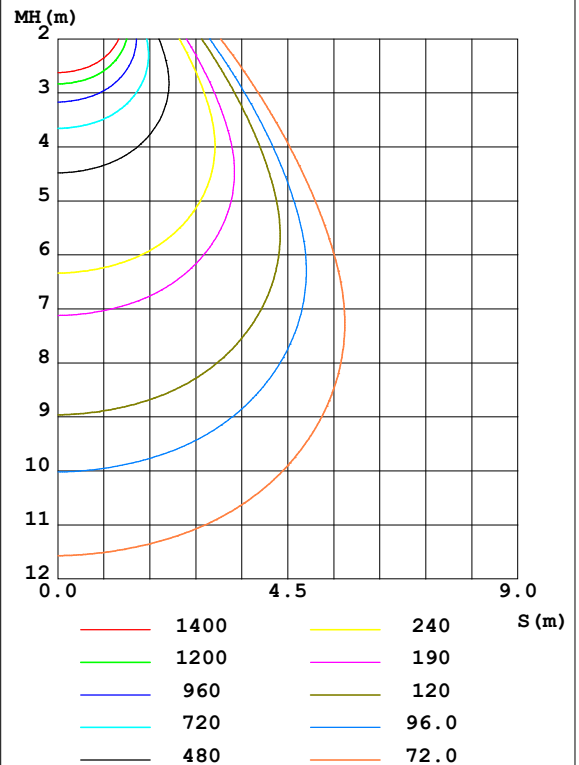
Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm		
NAME: H17-120W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 163.25 lm/W			
MODEL		I _{max} (cd)	9699	S/MH(C0/180)	1.17
NOMINAL POWER(W)	120	LOR(%)	100.0	S/MH(C90/270)	1.20
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	19251	□ UP,DN(C0-180)	0.5,52.7
NOMINAL FLUX(lm)	19250.6	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.5,46.3
LAMPS INSIDE	1	□ up(%)	1.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	□ down(%)	99.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: Marvin Ma
Test Date: 2022-08-30

□ Range: 0 - 180DEG
□ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 6.500m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

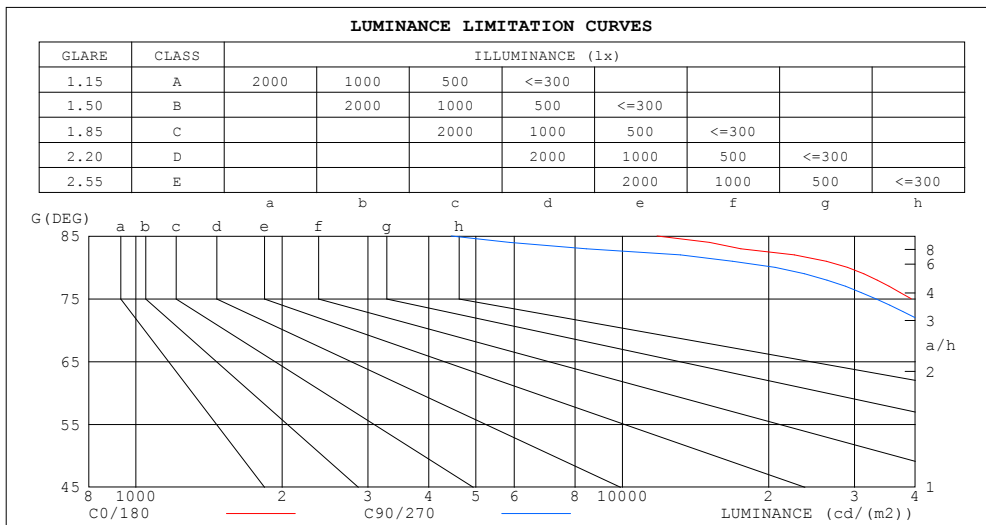
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	9629	9607	9638	9671	9605	9590	9609	9647	0- 10	920.2	920.2	4.78,4.78
20	9534	9681	9689	9491	9216	9168	9224	9342	10- 20	2704	3624	18.8,18.8
30	8921	9188	9068	8616	8113	8048	8235	8508	20- 30	4194	7818	40.6,40.6
40	7027	7123	6714	6044	5117	5152	5520	6098	30- 40	4694	12512	65,65
50	3567	3617	3255	2894	2361	2438	2673	3007	40- 50	3395	15907	82.6,82.6
60	1614	1645	1491	1323	1069	1120	1243	1395	50- 60	1844	17750	92.2,92.2
70	697.3	713.6	630.4	556.4	444.2	473.1	527.5	600.6	60- 70	915.7	18666	97,97
80	209.1	152.2	148.5	99.15	98.05	83.74	137.6	118.4	70- 80	357.9	19024	98.8,98.8
90	7.666	8.384	6.476	7.926	6.838	8.918	7.107	8.923	80- 90	38.52	19062	99,99
100	8.160	8.339	8.951	9.597	10.45	10.37	9.751	8.911	90-100	8.814	19071	99.1,99.1
110	14.38	14.29	15.57	16.33	18.08	17.81	17.12	15.50	100-110	13.19	19084	99.1,99.1
120	23.20	22.59	24.62	25.15	28.21	27.53	27.19	24.64	110-120	20.36	19105	99.2,99.2
130	33.64	32.26	35.04	34.98	39.68	38.27	38.65	35.20	120-130	27.37	19132	99.4,99.4
140	43.59	42.88	44.35	45.46	50.25	49.40	49.51	46.49	130-140	31.84	19164	99.6,99.6
150	52.15	52.51	52.85	54.74	59.13	59.77	58.17	56.80	140-150	32.09	19196	99.7,99.7
160	61.66	61.33	62.64	63.46	68.39	67.99	67.33	65.94	150-160	27.74	19224	99.9,99.9
170	71.67	70.85	72.39	72.57	76.06	75.55	75.60	74.12	160-170	19.55	19243	100,100
180	78.28	77.47	78.35	77.78	78.25	77.57	78.32	77.86	170-180	7.214	19251	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-08-30

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm		
NAME: H17-120W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	11778	4448
80	29021	20606
75	39242	33186
70	49124	44416
65	61374	56547
60	77776	71840
55	100157	92534
50	133705	122017
45	177975	164037

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:6.500m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm					
NAME: H17-120W-4K			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.: RAB LIGHTING INC			SUR.:0.23m		Shielding Angle:

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0														
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0														
RCR	RCR:Room Cavity Ratio															Wall Exitance Coefficients (WEC)														
0.0																														
1.0	.234	.133	.042	.227	.130	.041	.214	.123	.039	.201	.116	.037	.190	.110	.035															
2.0	.228	.125	.038	.222	.122	.038	.210	.117	.036	.199	.112	.035	.189	.107	.034															
3.0	.217	.115	.035	.212	.113	.034	.201	.109	.033	.192	.105	.032	.183	.101	.031															
4.0	.205	.107	.031	.200	.105	.031	.191	.102	.030	.183	.098	.030	.175	.095	.029															
5.0	.194	.099	.029	.190	.097	.028	.182	.095	.028	.174	.092	.027	.167	.089	.027															
6.0	.183	.092	.026	.179	.091	.026	.172	.088	.026	.165	.086	.025	.159	.084	.025															
7.0	.173	.085	.024	.170	.084	.024	.163	.082	.024	.157	.081	.023	.152	.079	.023															
8.0	.164	.080	.022	.161	.079	.022	.155	.077	.022	.150	.076	.022	.144	.074	.022															
9.0	.155	.075	.021	.152	.074	.021	.147	.073	.021	.142	.071	.020	.138	.070	.020															
10.0	.147	.071	.020	.145	.070	.020	.140	.069	.019	.136	.067	.019	.132	.066	.019															

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.198	.198	.198	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.183	.164	.148	.156	.141	.127	.107	.097	.088	.062	.056	.051	.020	.018	.017	
2.0	.171	.140	.113	.147	.120	.098	.101	.083	.068	.058	.048	.040	.019	.016	.013	
3.0	.162	.122	.089	.139	.105	.078	.095	.073	.054	.055	.043	.032	.018	.014	.010	
4.0	.154	.108	.072	.132	.093	.063	.091	.065	.044	.052	.038	.026	.017	.012	.009	
5.0	.146	.097	.060	.126	.084	.052	.087	.059	.037	.050	.034	.022	.016	.011	.007	
6.0	.140	.088	.051	.120	.076	.045	.083	.053	.032	.048	.031	.019	.015	.010	.006	
7.0	.133	.081	.044	.115	.070	.039	.079	.049	.027	.046	.029	.016	.015	.010	.005	
8.0	.128	.075	.039	.110	.065	.034	.076	.046	.024	.044	.027	.014	.014	.009	.005	
9.0	.122	.070	.035	.105	.061	.031	.073	.043	.022	.042	.025	.013	.014	.008	.004	
10.0	.117	.066	.032	.101	.057	.028	.070	.040	.020	.041	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm										
NAME: H17-120W-4K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: RAB LIGHTING INC					SUR.:0.23m			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	28.7	30.0	29.0	30.2	30.4	28.5	29.7	28.7	29.9	30.1
3H	29.0	30.2	29.3	30.4	30.7	28.8	29.9	29.1	30.2	30.4
4H	29.1	30.2	29.4	30.5	30.7	28.8	29.9	29.1	30.2	30.4
6H	29.2	30.2	29.5	30.5	30.7	28.8	29.8	29.1	30.1	30.4
8H	29.1	30.1	29.5	30.4	30.7	28.8	29.8	29.1	30.0	30.3
12H	29.1	30.0	29.4	30.3	30.6	28.7	29.7	29.1	30.0	30.3
4H 2H	28.8	29.9	29.1	30.2	30.4	28.6	29.7	28.9	29.9	30.2
3H	29.3	30.2	29.6	30.5	30.8	29.0	30.0	29.4	30.3	30.6
4H	29.4	30.3	29.8	30.6	31.0	29.2	30.0	29.5	30.3	30.7
6H	29.5	30.2	29.9	30.6	31.0	29.2	29.9	29.6	30.3	30.7
8H	29.5	30.2	29.9	30.6	31.0	29.1	29.8	29.6	30.2	30.6
12H	29.5	30.1	29.9	30.5	30.9	29.1	29.7	29.5	30.1	30.5
8H 4H	29.4	30.1	29.8	30.5	30.9	29.1	29.8	29.6	30.2	30.6
6H	29.5	30.1	30.0	30.5	30.9	29.2	29.8	29.7	30.2	30.6
8H	29.5	30.0	30.0	30.5	30.9	29.2	29.7	29.6	30.1	30.6
12H	29.5	29.9	30.0	30.4	30.9	29.1	29.6	29.6	30.0	30.5
12H 4H	29.4	30.0	29.8	30.4	30.8	29.1	29.7	29.5	30.1	30.6
6H	29.5	30.0	30.0	30.4	30.9	29.2	29.7	29.6	30.1	30.6
8H	29.5	29.9	30.0	30.4	30.9	29.1	29.6	29.6	30.0	30.5
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.4					+ 1.1 / - 1.5				
1.5H	+ 0.9 / - 0.9					+ 1.0 / - 1.0				
2.0H	+ 2.2 / - 1.7					+ 2.1 / - 1.7				

CIE Pub.117, 19251 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 10.3$)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm		
NAME: H17-120W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23m	Shielding Angle:

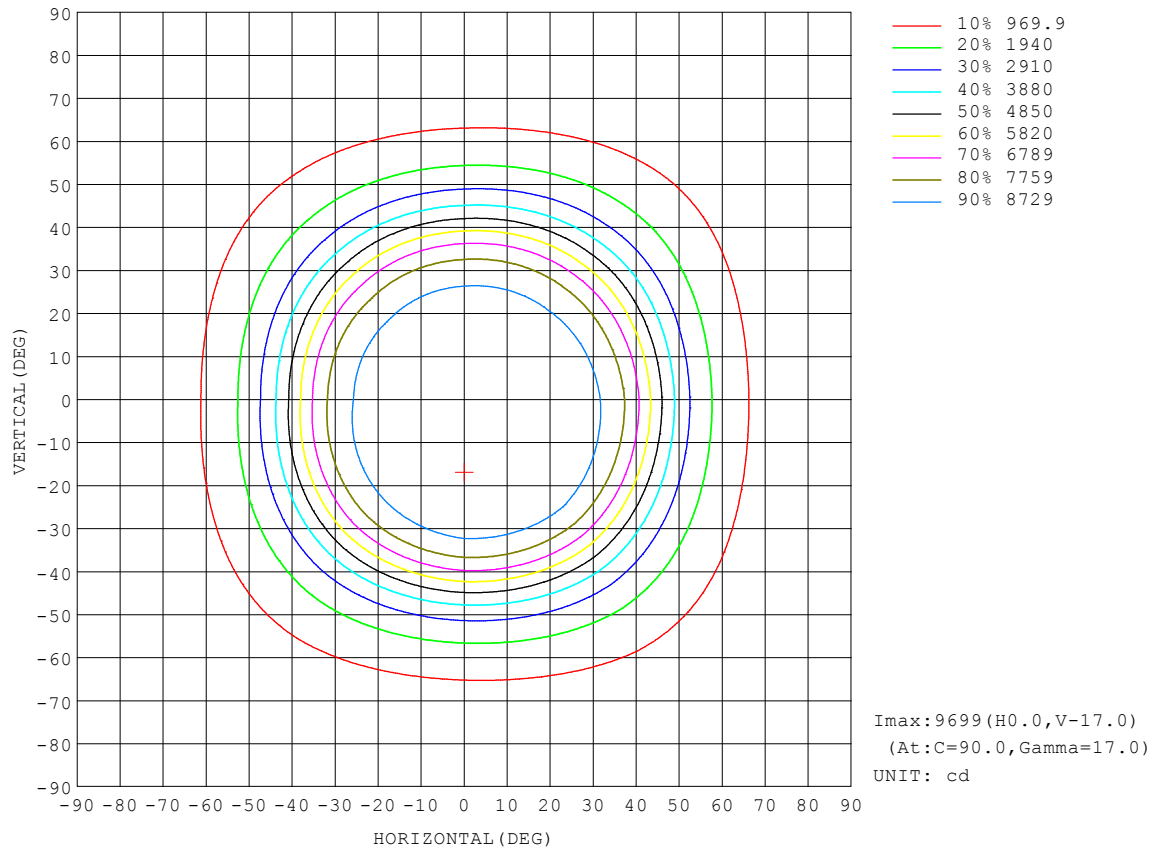
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	69	60	54	69	60	54	68	59	54	49
0.80	79	70	64	78	70	64	77	69	64	58
1.00	87	78	72	86	78	72	83	78	72	66
1.25	93	85	79	91	84	79	89	83	78	72
1.50	97	89	84	95	89	84	93	87	83	76
2.00	102	96	91	100	94	90	97	92	89	82
2.50	105	99	95	103	98	94	99	95	92	84
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	102	100	92
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Marvin Ma
 Test Date: 2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity: 56%
 Test Distance: 6.500m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm		
NAME: H17-120W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23m	Shielding Angle:

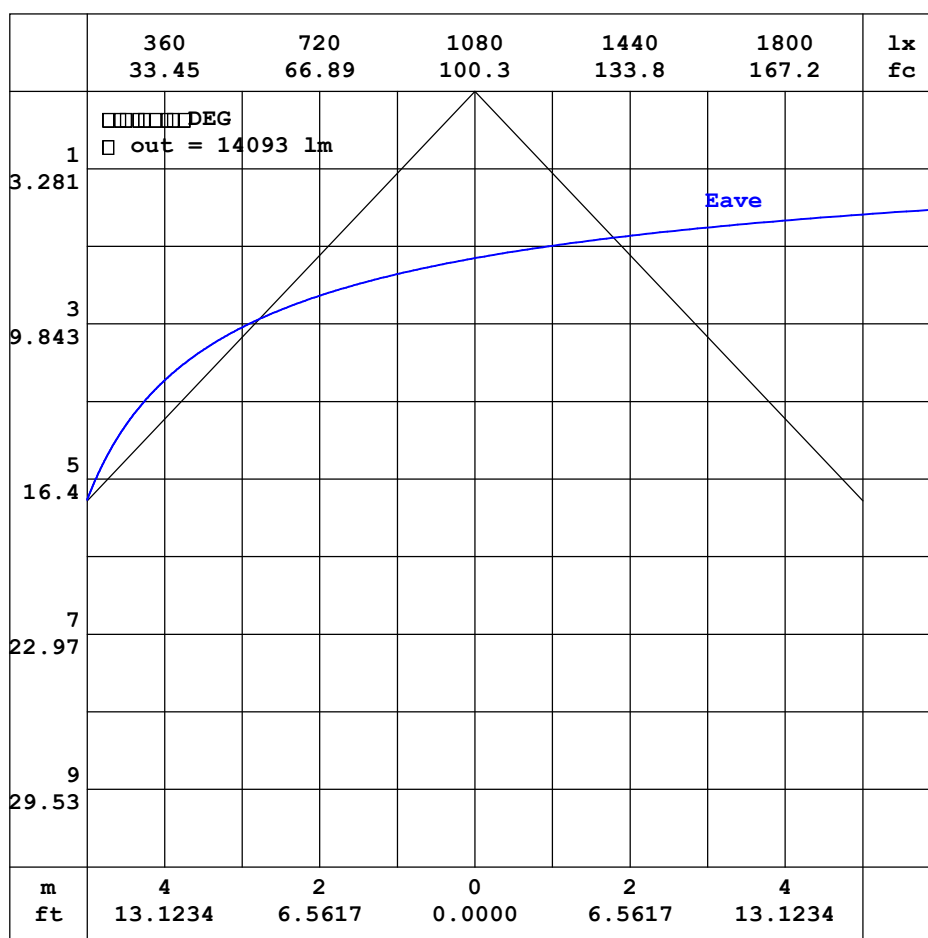


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:6.500m [K=1.0000]
Remarks:

AAI CURVES

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm		
NAME: H17-120W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23m	Shielding Angle:

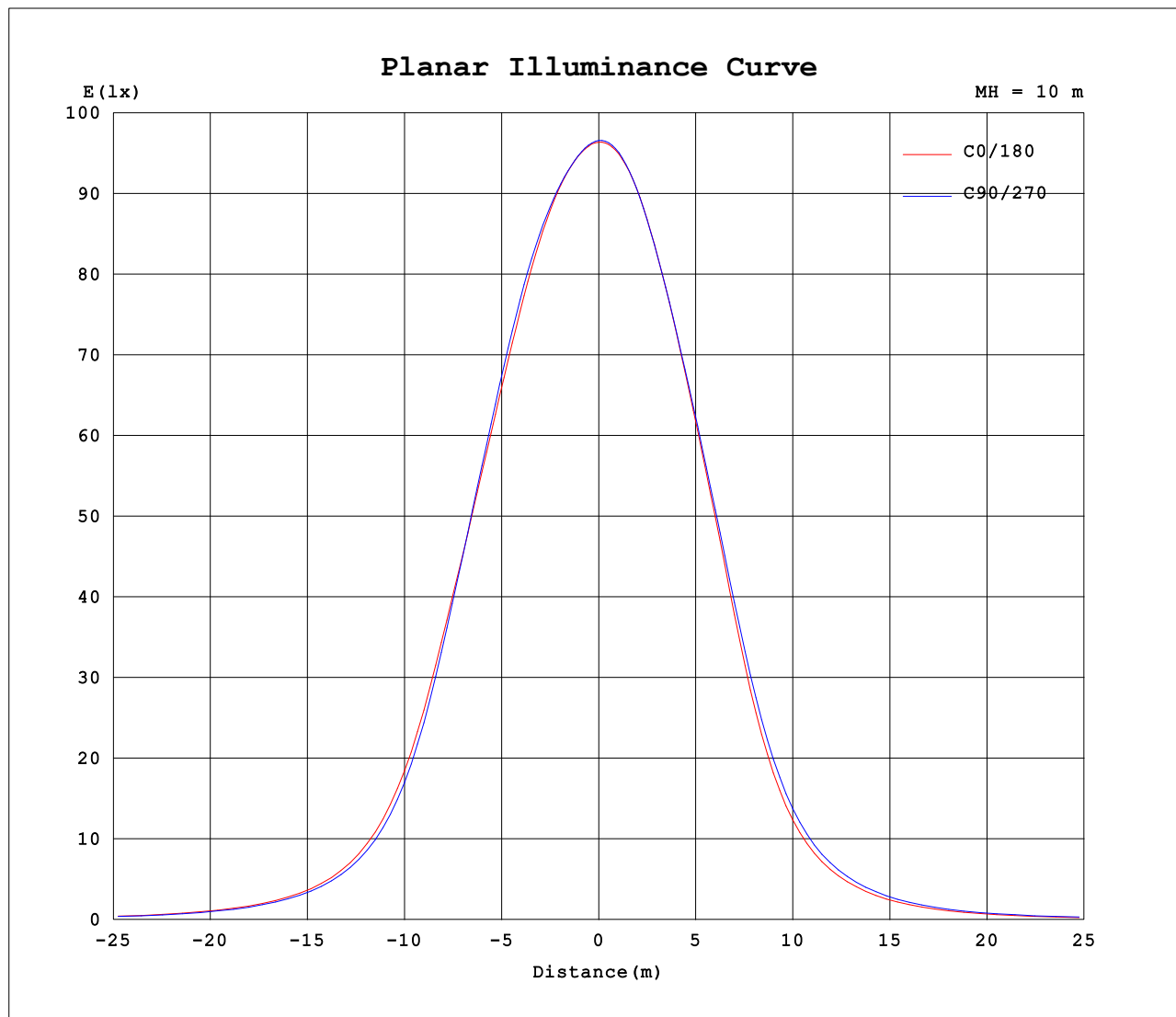


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Marvin Ma
 Test Date: 2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity: 56%
 Test Distance: 6.500m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: Marvin Ma
Test Date: 2022-08-30

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 6.500m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:122.2V I:0.9676A P:117.9W PF:0.9977 Freq:59.98Hz Lamp Flux:19250.6x1 lm								
NAME: H17-120W-4K					TYPE:			WEIGHT:
SPEC.:					DIM.:			SERIAL No.:
MFR.: RAB LIGHTING INC					SUR.:0.23m			Shielding Angle:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	9638	9646	9659	9668	9638	9646	9659	9668										
5	9624	9610	9630	9667	9648	9655	9666	9673										
10	9629	9607	9638	9671	9605	9590	9609	9647										
15	9621	9653	9685	9637	9466	9430	9463	9545										
20	9534	9681	9689	9491	9216	9168	9224	9342										
25	9319	9568	9520	9176	8807	8754	8858	9029										
30	8921	9188	9068	8616	8113	8048	8235	8508										
35	8234	8453	8204	7657	6870	6815	7145	7606										
40	7027	7123	6714	6044	5117	5152	5520	6098										
45	5223	5270	4814	4268	3500	3571	3899	4403										
50	3567	3617	3255	2894	2361	2438	2673	3007										
55	2384	2447	2203	1968	1595	1668	1844	2057										
60	1614	1645	1491	1323	1069	1120	1243	1395										
65	1076	1099	992	878	704	743	822	930										
70	697	714	630	556	444	473	528	601										
75	421	412	356	305	245	266	309	342										
80	209	152	148	99.1	98.1	83.7	138	118										
85	42.6	16.4	16.1	11.4	9.36	12.1	20.0	16.1										
90	7.67	8.38	6.48	7.93	6.84	8.92	7.11	8.92										
95	7.11	8.14	6.83	8.14	7.70	8.73	7.50	8.66										
100	8.16	8.34	8.95	9.60	10.4	10.4	9.75	8.91										
105	10.9	11.0	11.9	12.6	13.9	13.8	13.1	11.8										
110	14.4	14.3	15.6	16.3	18.1	17.8	17.1	15.5										
115	18.5	18.2	19.8	20.5	22.8	22.4	21.8	19.7										
120	23.2	22.6	24.6	25.2	28.2	27.5	27.2	24.6										
125	28.3	27.3	29.8	30.0	33.8	32.8	32.9	29.8										
130	33.6	32.3	35.0	35.0	39.7	38.3	38.7	35.2										
135	39.0	37.3	39.9	39.9	45.3	43.7	44.4	40.7										
140	43.6	42.9	44.4	45.5	50.2	49.4	49.5	46.5										
145	47.9	48.1	48.6	50.6	54.7	55.2	53.9	52.2										
150	52.2	52.5	52.8	54.7	59.1	59.8	58.2	56.8										
155	56.7	56.7	57.5	58.9	63.7	63.9	62.6	61.4										
160	61.7	61.3	62.6	63.5	68.4	68.0	67.3	65.9										
165	66.9	66.2	67.8	68.2	72.8	72.4	71.9	70.4										
170	71.7	70.8	72.4	72.6	76.1	75.6	75.6	74.1										
175	75.7	74.8	76.1	75.9	78.0	77.4	77.8	76.8										
180	78.3	77.5	78.4	77.8	78.2	77.6	78.3	77.9										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-08-30

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks: