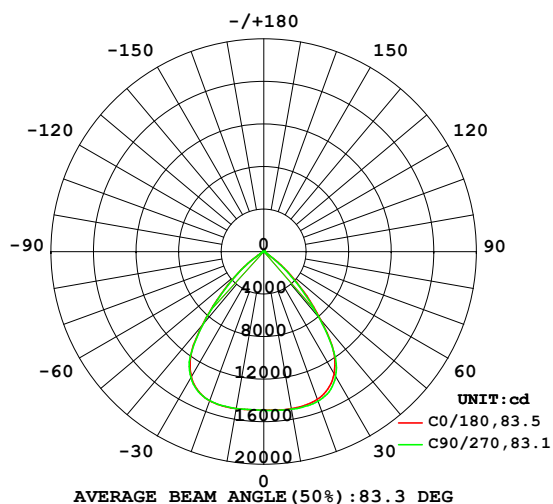


## LUMINAIRE PHOTOMETRIC TEST REPORT

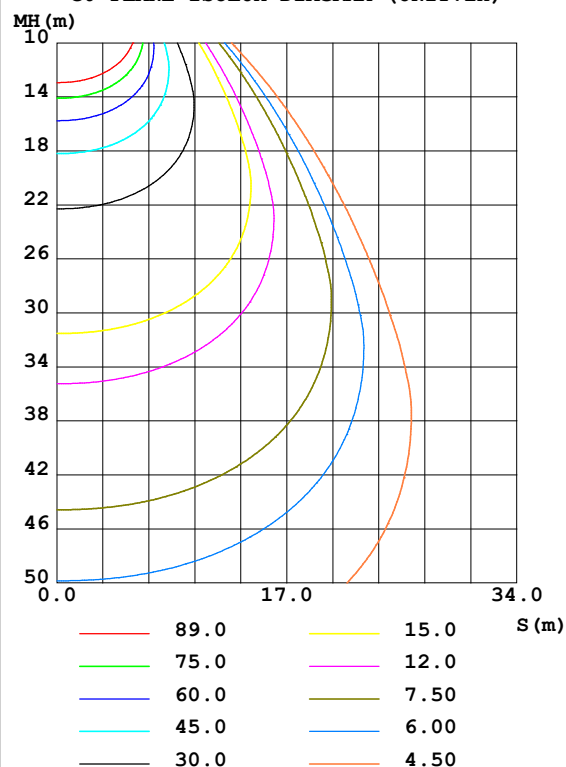
Test:U:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 161.32 lm/W			
MODEL		I <sub>max</sub> (cd)	15070	S/MH(C0/180)	1.22
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	25316	□ UP,DN(C0-180)	0.5,48.7
NOMINAL FLUX(lm)	25315.6	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.5,50.3
LAMPS INSIDE	1	□ up(%)	1.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	□ down(%)	99.0	CIBSE SHR MAX	1.25

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:2022-08-31

□ 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:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	1499	1504	1505	1502	1499	1496	1497	1498	0- 10	1428	1428	5.64,5.64
20	1477	1487	1495	1491	1492	1497	1491	1477	10- 20	4247	5675	22.4,22.4
30	1324	1336	1352	1363	1360	1382	1370	1324	20- 30	6634	12309	48.6,48.6
40	832.4	804.0	812.4	883.5	896.9	950.5	887.8	803.7	30- 40	7153	19462	76.9,76.9
50	290.7	256.6	263.1	321.2	325.3	349.9	314.2	270.8	40- 50	4255	23718	93.7,93.7
60	28.36	24.66	27.94	33.48	32.62	40.37	38.48	29.76	50- 60	1102	24819	98,98
70	7.663	7.144	8.542	8.597	7.885	11.22	12.74	9.653	60- 70	163.4	24983	98.7,98.7
80	2.840	2.562	3.133	3.204	2.849	4.184	4.751	3.543	70- 80	62.56	25045	98.9,98.9
90	0.6027	0.5243	0.5419	0.5546	0.4572	0.4851	0.5409	0.5600	80- 90	17.84	25063	99,99
100	1.002	1.014	0.9875	0.8791	0.8224	0.7766	0.8162	0.9110	90-100	7.079	25070	99,99
110	1.972	2.001	1.981	1.783	1.746	1.638	1.715	1.812	100-110	13.96	25084	99.1,99.1
120	3.427	3.395	3.471	3.129	3.190	2.980	3.175	3.192	110-120	24.76	25109	99.2,99.2
130	5.140	4.898	5.213	4.642	4.969	4.548	4.943	4.762	120-130	36.22	25145	99.3,99.3
140	6.579	6.609	6.654	6.356	6.610	6.316	6.651	6.540	130-140	44.07	25189	99.5,99.5
150	7.874	8.011	7.986	7.813	8.089	7.976	8.101	8.232	140-150	45.56	25235	99.7,99.7
160	9.474	9.523	9.570	9.311	9.716	9.534	9.680	9.761	150-160	40.35	25275	99.8,99.8
170	11.14	11.10	11.18	10.97	11.31	11.11	11.29	11.27	160-170	29.24	25305	100,100
180	12.14	12.00	12.13	12.03	12.14	12.01	12.13	12.03	170-180	11.05	25316	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 22035 lm

%lum = 87.0%

%lamp = 87.0%

Conical surface Flux(120deg): 24819 lm

%lum = 98.0%

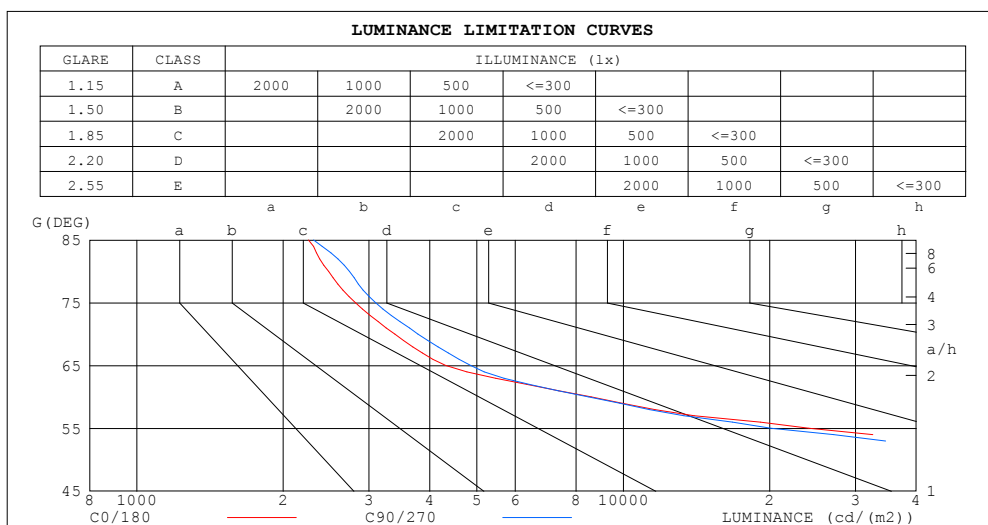
%lamp = 98.0%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Marvin Ma  
 Test Date:2022-08-31

□ 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:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2253	2310
80	2478	2734
75	2818	3098
70	3395	3784
65	4317	4856
60	8593	8467
55	24054	20080
50	68511	62010
45	113092	108250

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Marvin Ma  
Test Date:2022-08-31

☐ 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:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	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	.205 .116 .037	.198 .113 .036	.184 .106 .034	.172 .099 .032	.161 .093 .030	
2.0	.200 .109 .034	.193 .107 .033	.182 .101 .031	.172 .096 .030	.162 .092 .029	
3.0	.192 .102 .031	.186 .100 .030	.177 .096 .029	.167 .092 .028	.159 .088 .027	
4.0	.183 .095 .028	.179 .093 .028	.170 .090 .027	.162 .087 .026	.154 .084 .026	
5.0	.175 .089 .026	.171 .088 .026	.163 .085 .025	.156 .082 .024	.149 .080 .024	
6.0	.167 .084 .024	.163 .082 .024	.156 .080 .023	.150 .078 .023	.144 .076 .022	
7.0	.159 .079 .022	.156 .078 .022	.150 .076 .022	.144 .074 .021	.138 .072 .021	
8.0	.152 .074 .021	.149 .073 .021	.143 .072 .020	.138 .070 .020	.133 .068 .020	
9.0	.145 .070 .020	.142 .069 .019	.137 .068 .019	.132 .066 .019	.128 .065 .019	
10.0	.138 .066 .018	.136 .066 .018	.131 .064 .018	.127 .063 .018	.123 .062 .018	

<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	.116 .116 .116	.066 .066 .066	.021 .021 .021	
1.0	.181 .165 .150	.155 .141 .129	.106 .097 .089	.061 .056 .052	.019 .018 .017	
2.0	.168 .140 .117	.144 .121 .101	.098 .083 .070	.057 .049 .041	.018 .016 .013	
3.0	.157 .122 .093	.135 .105 .081	.092 .073 .057	.053 .043 .033	.017 .014 .011	
4.0	.148 .107 .076	.127 .093 .066	.088 .065 .046	.051 .038 .027	.016 .012 .009	
5.0	.141 .096 .063	.121 .083 .055	.083 .058 .039	.048 .034 .023	.016 .011 .008	
6.0	.134 .087 .054	.115 .076 .047	.080 .053 .033	.046 .031 .020	.015 .010 .006	
7.0	.128 .080 .046	.110 .069 .041	.076 .049 .029	.044 .029 .017	.014 .009 .006	
8.0	.123 .074 .041	.106 .064 .036	.073 .045 .025	.043 .027 .015	.014 .009 .005	
9.0	.118 .069 .037	.101 .060 .032	.070 .042 .023	.041 .025 .013	.013 .008 .004	
10.0	.113 .065 .033	.098 .056 .029	.068 .040 .020	.039 .024 .012	.013 .008 .004	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Marvin Ma  
 Test Date:2022-08-31

☐ 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:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm										
NAME: H17XL-RAL-150W-5K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: RAB LIGHTING INC					SUR.:0.29*0.29m			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	25.1	26.2	25.4	26.4	26.6	25.0	26.1	25.2	26.3	26.5
3H	24.9	26.0	25.2	26.2	26.4	24.8	25.8	25.1	26.1	26.3
4H	24.8	25.8	25.1	26.1	26.3	24.7	25.7	25.0	25.9	26.2
6H	24.7	25.6	25.1	25.9	26.2	24.6	25.5	24.9	25.8	26.1
8H	24.7	25.6	25.0	25.8	26.1	24.6	25.5	24.9	25.7	26.0
12H	24.6	25.5	25.0	25.8	26.1	24.5	25.4	24.9	25.7	26.0
4H 2H	24.8	25.8	25.1	26.1	26.3	24.7	25.7	25.0	25.9	26.2
3H	24.7	25.5	25.0	25.8	26.1	24.5	25.4	24.9	25.7	26.0
4H	24.6	25.3	24.9	25.6	26.0	24.5	25.2	24.8	25.5	25.9
6H	24.5	25.1	24.9	25.5	25.9	24.4	25.0	24.8	25.4	25.8
8H	24.4	25.0	24.8	25.4	25.8	24.3	24.9	24.7	25.3	25.7
12H	24.4	24.9	24.8	25.3	25.7	24.3	24.8	24.7	25.2	25.6
8H 4H	24.4	25.0	24.8	25.4	25.8	24.3	24.9	24.7	25.3	25.7
6H	24.3	24.8	24.8	25.2	25.7	24.2	24.7	24.7	25.1	25.6
8H	24.3	24.7	24.8	25.2	25.6	24.2	24.6	24.7	25.1	25.5
12H	24.2	24.6	24.7	25.1	25.6	24.1	24.5	24.6	25.0	25.5
12H 4H	24.4	24.9	24.8	25.3	25.7	24.3	24.8	24.7	25.2	25.6
6H	24.3	24.7	24.8	25.2	25.6	24.2	24.6	24.6	25.1	25.5
8H	24.2	24.6	24.7	25.1	25.6	24.1	24.5	24.6	25.0	25.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -10.9					+ 2.5 / -10.8				
1.5H	+ 3.2 / - 8.8					+ 3.3 / - 8.9				
2.0H	+ 6.0 / -12.2					+ 6.0 / -11.6				

CIE Pub.117, 25316 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 11.2$ )

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Marvin Ma  
 Test Date:2022-08-31

☐ 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:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

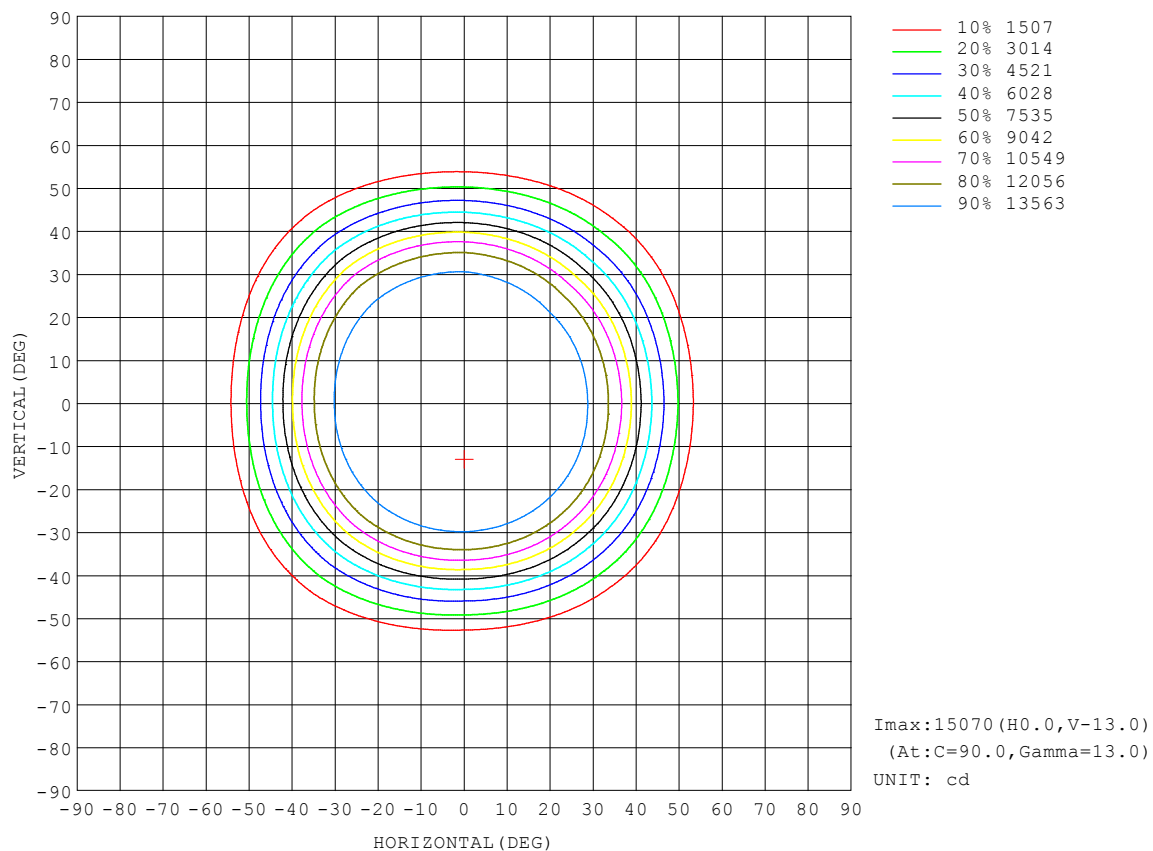
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	64	76	68	64	75	68	63	59
0.80	86	78	73	85	78	73	84	77	73	68
1.00	93	85	81	92	85	80	90	85	80	75
1.25	98	91	87	97	91	87	94	89	86	81
1.50	101	95	91	100	95	91	97	93	89	84
2.00	105	100	96	104	99	96	101	97	94	88
2.50	107	103	99	106	101	98	102	99	96	90
3.00	109	105	102	107	104	101	104	101	98	91
4.00	112	108	106	110	107	104	106	103	101	93
5.00	113	110	108	111	108	106	107	105	103	95
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:2022-08-31

☐ 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:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

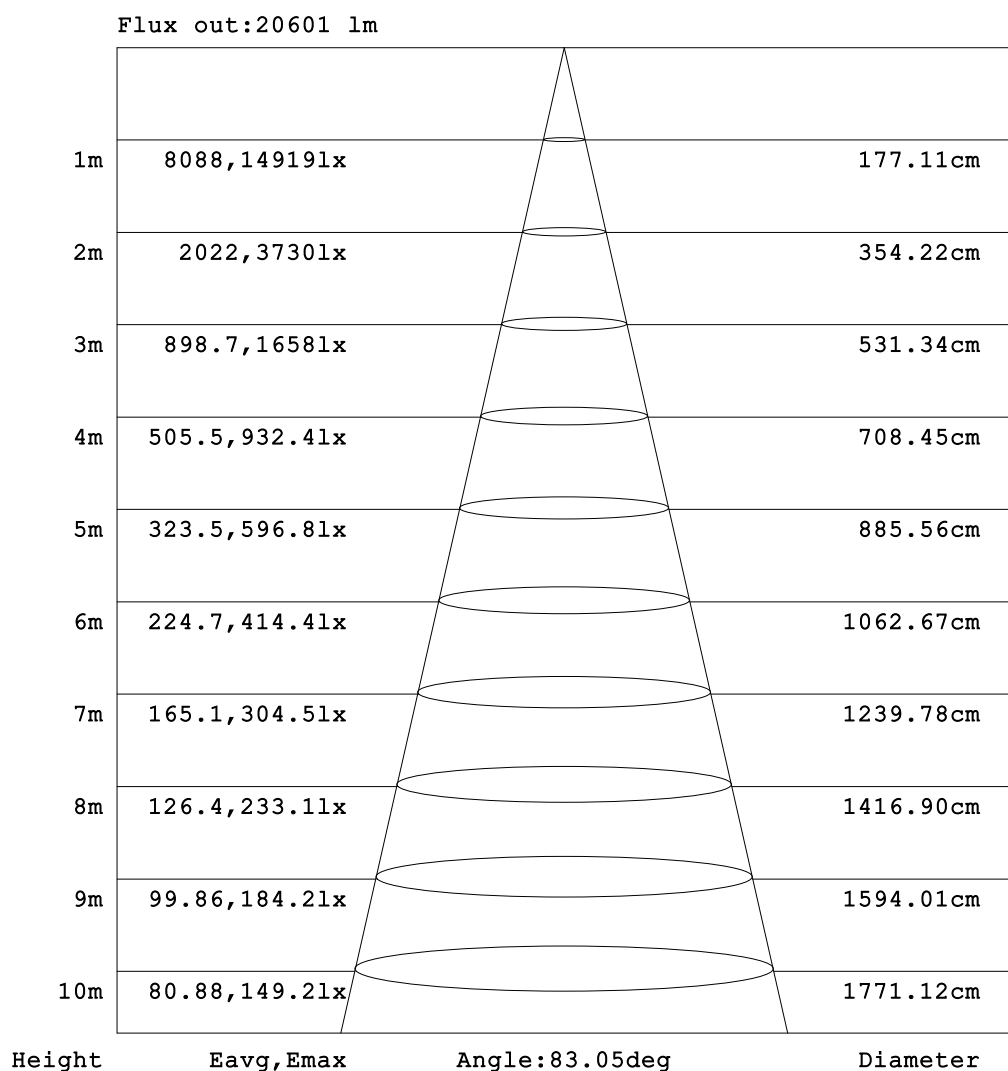


C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Marvin Ma  
Test Date:2022-08-31

☐ 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 Figure

Test:U:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:



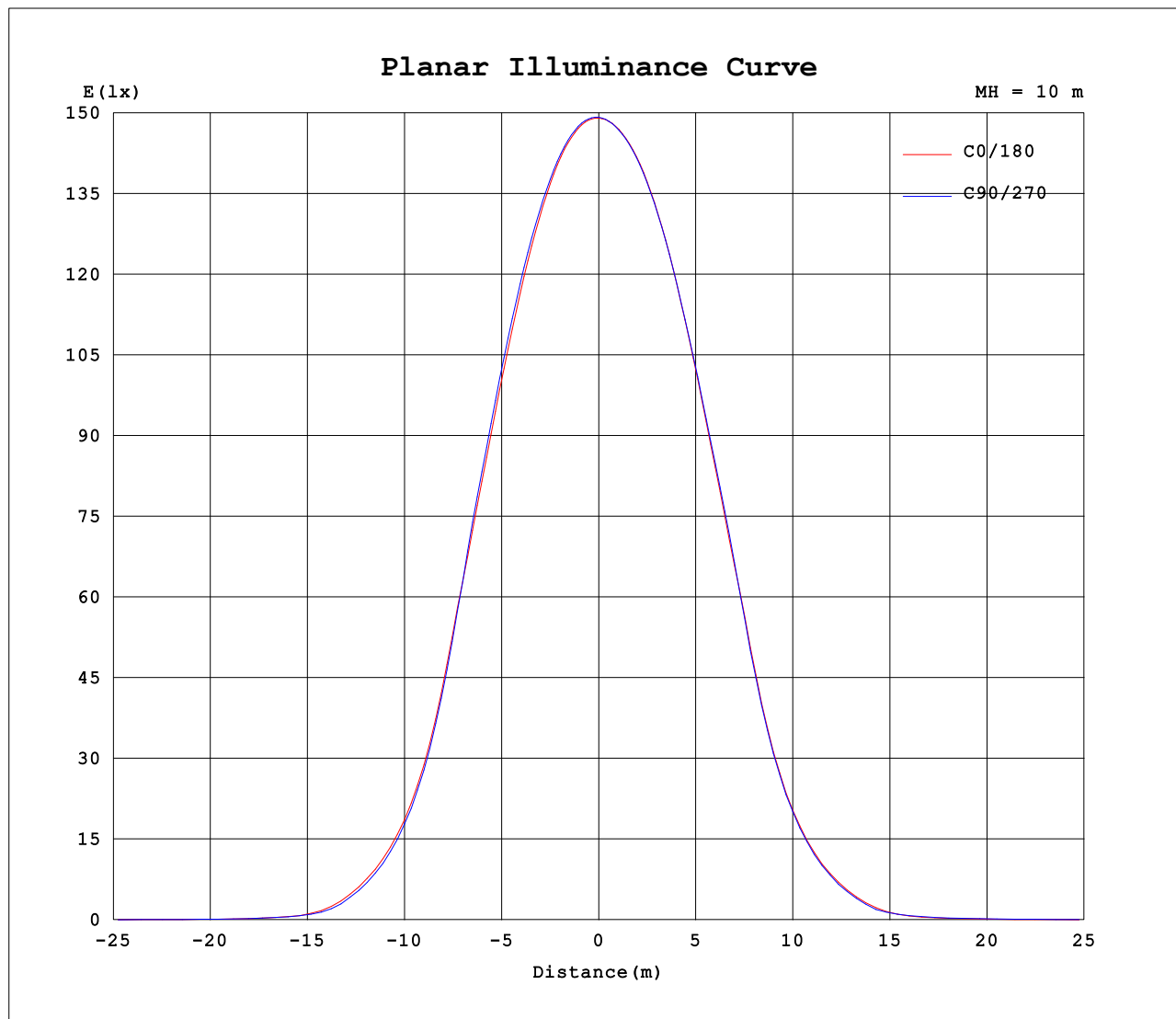
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Marvin Ma  
 Test Date:2022-08-31

☐ 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: 2022-08-31

☐ 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:120.6V I:1.304A P:156.9W PF:0.9979 Freq:59.98Hz Lamp Flux:25315.6x1 lm		
NAME: H17XL-RAL-150W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

Table--1

UNIT: ×10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	1491	1491	1492	1491	1491	1491	1492	1491										
5	1495	1498	1498	1495	1492	1490	1491	1494										
10	1499	1504	1505	1502	1499	1496	1497	1498										
15	1496	1503	1507	1503	1502	1503	1500	1495										
20	1477	1487	1495	1491	1492	1497	1491	1477										
25	1427	1440	1454	1453	1451	1464	1454	1428										
30	1324	1336	1352	1363	1360	1382	1370	1324										
35	1146	1136	1145	1196	1199	1239	1209	1131										
40	832	804	812	884	897	950	888	804										
45	528	499	505	568	576	618	570	506										
50	291	257	263	321	325	350	314	271										
55	91.1	69.8	76.0	120	119	127	104	83.8										
60	28.4	24.7	27.9	33.5	32.6	40.4	38.5	29.8										
65	12.0	11.4	13.5	14.1	13.0	17.8	19.3	14.7										
70	7.66	7.14	8.54	8.60	7.89	11.2	12.7	9.65										
75	4.81	4.40	5.29	5.33	4.87	7.09	8.10	6.11										
80	2.84	2.56	3.13	3.20	2.85	4.18	4.75	3.54										
85	1.30	1.11	1.33	1.57	1.34	1.97	2.08	1.49										
90	0.60	0.52	0.54	0.55	0.46	0.49	0.54	0.56										
95	0.70	0.70	0.68	0.61	0.55	0.53	0.58	0.65										
100	1.00	1.01	0.99	0.88	0.82	0.78	0.82	0.91										
105	1.43	1.45	1.42	1.27	1.22	1.15	1.19	1.30										
110	1.97	2.00	1.98	1.78	1.75	1.64	1.71	1.81										
115	2.65	2.66	2.68	2.41	2.40	2.25	2.37	2.45										
120	3.43	3.40	3.47	3.13	3.19	2.98	3.18	3.19										
125	4.26	4.14	4.32	3.88	4.05	3.75	4.02	3.96										
130	5.14	4.90	5.21	4.64	4.97	4.55	4.94	4.76										
135	5.91	5.72	5.97	5.46	5.80	5.38	5.83	5.59										
140	6.58	6.61	6.65	6.36	6.61	6.32	6.65	6.54										
145	7.23	7.34	7.31	7.12	7.34	7.19	7.38	7.41										
150	7.87	8.01	7.99	7.81	8.09	7.98	8.10	8.23										
155	8.63	8.72	8.74	8.51	8.86	8.72	8.85	8.97										
160	9.47	9.52	9.57	9.31	9.72	9.53	9.68	9.76										
165	10.3	10.4	10.4	10.2	10.6	10.4	10.5	10.6										
170	11.1	11.1	11.2	11.0	11.3	11.1	11.3	11.3										
175	11.8	11.8	11.8	11.7	11.9	11.7	11.9	11.9										
180	12.1	12.0	12.1	12.0	12.1	12.0	12.1	12.0										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Marvin Ma  
 Test Date:2022-08-31

□ 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: