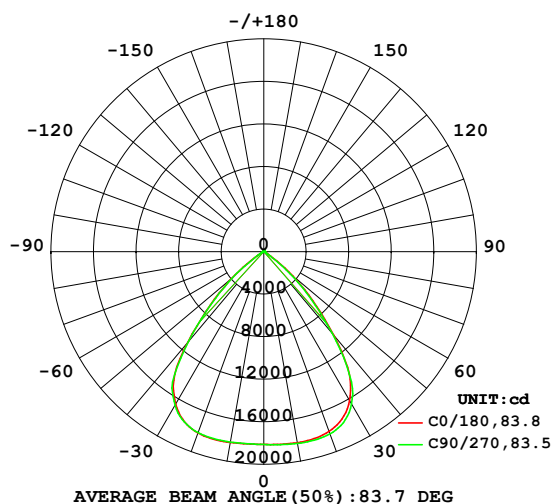


LUMINAIRE PHOTOMETRIC TEST REPORT

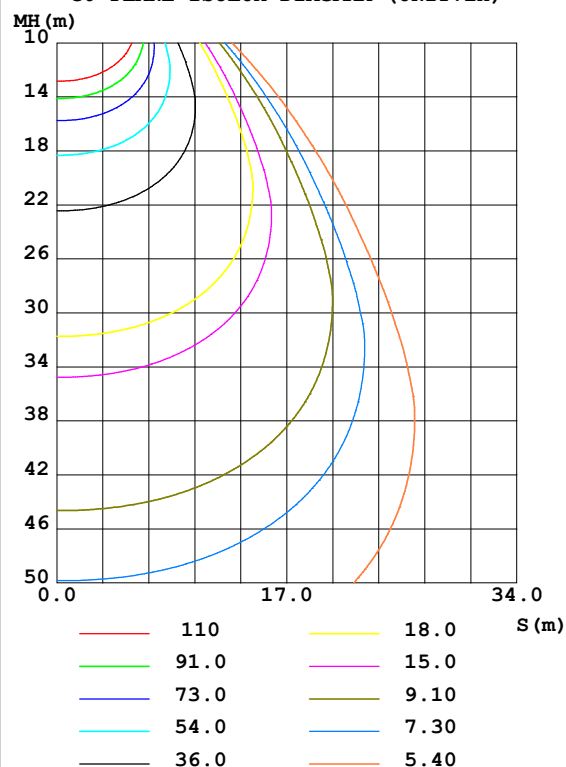
Test:U:120.6V I:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 152.03 lm/W			
MODEL		I _{max} (cd)	18346	S/MH(C0/180)	1.22
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	30995	□ UP,DN(C0-180)	0.5,48.7
NOMINAL FLUX(lm)	30994.8	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	1824	1830	1831	1826	1821	1818	1817	1819	0- 10	1736	1736	5.6,5.6
20	1798	1812	1824	1816	1813	1817	1810	1795	10- 20	5165	6901	22.3,22.3
30	1615	1629	1653	1663	1657	1682	1669	1615	20- 30	8077	14978	48.3,48.3
40	1022	997.0	1003	1100	1112	1164	1103	988.5	30- 40	8783	23761	76.7,76.7
50	358.7	316.0	325.5	396.3	400.9	431.4	387.1	333.7	40- 50	5261	29022	93.6,93.6
60	34.74	30.23	34.29	40.90	39.97	49.68	47.32	36.46	50- 60	1360	30382	98,98
70	9.533	8.903	10.65	10.68	9.768	13.93	15.90	12.00	60- 70	202.0	30584	98.7,98.7
80	3.539	3.194	3.905	3.984	3.538	5.200	5.913	4.406	70- 80	77.81	30662	98.9,98.9
90	0.7438	0.6463	0.6670	0.6845	0.5666	0.5971	0.6646	0.6864	80- 90	22.13	30684	99,99
100	1.236	1.250	1.219	1.083	1.014	0.9607	1.006	1.124	90-100	8.733	30693	99,99
110	2.436	2.471	2.449	2.203	2.154	2.027	2.118	2.243	100-110	17.25	30710	99.1,99.1
120	4.228	4.193	4.282	3.869	3.933	3.677	3.913	3.943	110-120	30.57	30740	99.2,99.2
130	6.327	6.044	6.416	5.730	6.114	5.613	6.089	5.880	120-130	44.68	30785	99.3,99.3
140	8.100	8.133	8.185	7.822	8.138	7.778	8.177	8.071	130-140	54.30	30839	99.5,99.5
150	9.694	9.863	9.819	9.613	9.952	9.814	9.969	10.12	140-150	56.08	30896	99.7,99.7
160	11.67	11.73	11.78	11.46	11.97	11.74	11.92	12.02	150-160	49.67	30945	99.8,99.8
170	13.73	13.67	13.77	13.51	13.94	13.68	13.90	13.87	160-170	36.01	30981	100,100
180	14.96	14.79	14.93	14.81	14.96	14.79	14.93	14.82	170-180	13.62	30995	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 26943 lm

%lum = 86.9%

%lamp = 86.9%

Conical surface Flux(120deg): 30382 lm

%lum = 98.0%

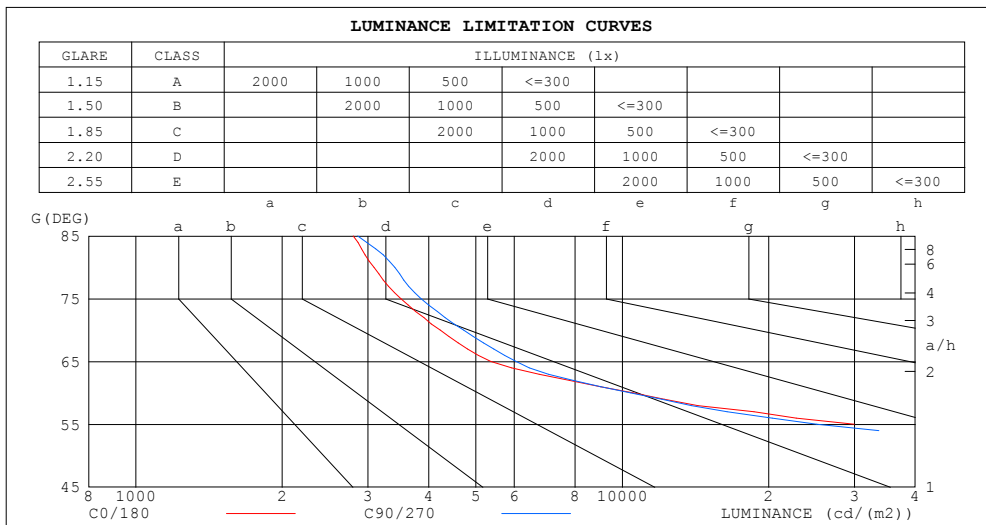
%lamp = 98.0%

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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm		
NAME: H17XL-RAL-200W-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	2797	2859
80	3088	3407
75	3509	3861
70	4223	4717
65	5368	6051
60	10527	10391
55	29956	25111
50	84562	76724
45	139794	134725

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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm		
NAME: H17XL-RAL-200W-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 .117 .037	.198 .113 .036	.185 .106 .034	.173 .100 .032	.161 .093 .030	
2.0	.200 .110 .034	.194 .107 .033	.182 .101 .032	.172 .096 .030	.162 .092 .029	
3.0	.192 .102 .031	.187 .100 .030	.177 .096 .029	.168 .092 .028	.159 .088 .027	
4.0	.184 .095 .028	.179 .094 .028	.170 .090 .027	.162 .087 .026	.155 .084 .026	
5.0	.175 .089 .026	.171 .088 .026	.163 .085 .025	.156 .082 .025	.150 .080 .024	
6.0	.167 .084 .024	.163 .083 .024	.157 .080 .023	.150 .078 .023	.144 .076 .023	
7.0	.159 .079 .022	.156 .078 .022	.150 .076 .022	.144 .074 .021	.139 .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	.133 .066 .019	.128 .065 .019	
10.0	.139 .066 .018	.136 .066 .018	.132 .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	.020 .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	.093 .073 .057	.053 .043 .033	.017 .014 .011	
4.0	.149 .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 .047	.110 .070 .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	.102 .060 .032	.070 .042 .023	.041 .025 .014	.013 .008 .004	
10.0	.113 .065 .033	.098 .057 .029	.068 .040 .021	.040 .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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm										
NAME: H17XL-RAL-200W-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	25.9	27.0	26.1	27.2	27.4	25.7	26.9	26.0	27.1	27.3
3H	25.7	26.7	26.0	26.9	27.2	25.6	26.6	25.9	26.8	27.1
4H	25.6	26.6	25.9	26.8	27.1	25.5	26.5	25.8	26.7	27.0
6H	25.5	26.4	25.8	26.7	26.9	25.4	26.3	25.7	26.6	26.8
8H	25.4	26.3	25.8	26.6	26.9	25.3	26.2	25.7	26.5	26.8
12H	25.4	26.2	25.7	26.5	26.8	25.3	26.1	25.6	26.4	26.7
4H 2H	25.6	26.6	25.9	26.8	27.1	25.5	26.5	25.8	26.7	27.0
3H	25.4	26.2	25.8	26.5	26.8	25.3	26.1	25.7	26.4	26.7
4H	25.3	26.1	25.7	26.4	26.7	25.2	26.0	25.6	26.3	26.6
6H	25.2	25.9	25.6	26.2	26.6	25.1	25.8	25.5	26.1	26.5
8H	25.2	25.8	25.6	26.2	26.6	25.1	25.7	25.5	26.1	26.5
12H	25.1	25.7	25.6	26.1	26.5	25.0	25.6	25.5	26.0	26.4
8H 4H	25.2	25.8	25.6	26.2	26.6	25.1	25.7	25.5	26.1	26.5
6H	25.1	25.6	25.5	26.0	26.4	25.0	25.5	25.4	25.9	26.3
8H	25.0	25.5	25.5	25.9	26.4	24.9	25.4	25.4	25.8	26.3
12H	25.0	25.4	25.5	25.8	26.3	24.9	25.3	25.4	25.7	26.2
12H 4H	25.1	25.7	25.6	26.1	26.5	25.0	25.6	25.5	26.0	26.4
6H	25.0	25.5	25.5	25.9	26.4	24.9	25.4	25.4	25.8	26.3
8H	25.0	25.4	25.5	25.8	26.3	24.9	25.3	25.4	25.7	26.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -10.9					+ 2.5 / -10.8				
1.5H	+ 3.2 / - 8.9					+ 3.2 / - 9.0				
2.0H	+ 6.0 / -12.1					+ 6.1 / -11.5				

CIE Pub.117, 30995 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 11.9$)

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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

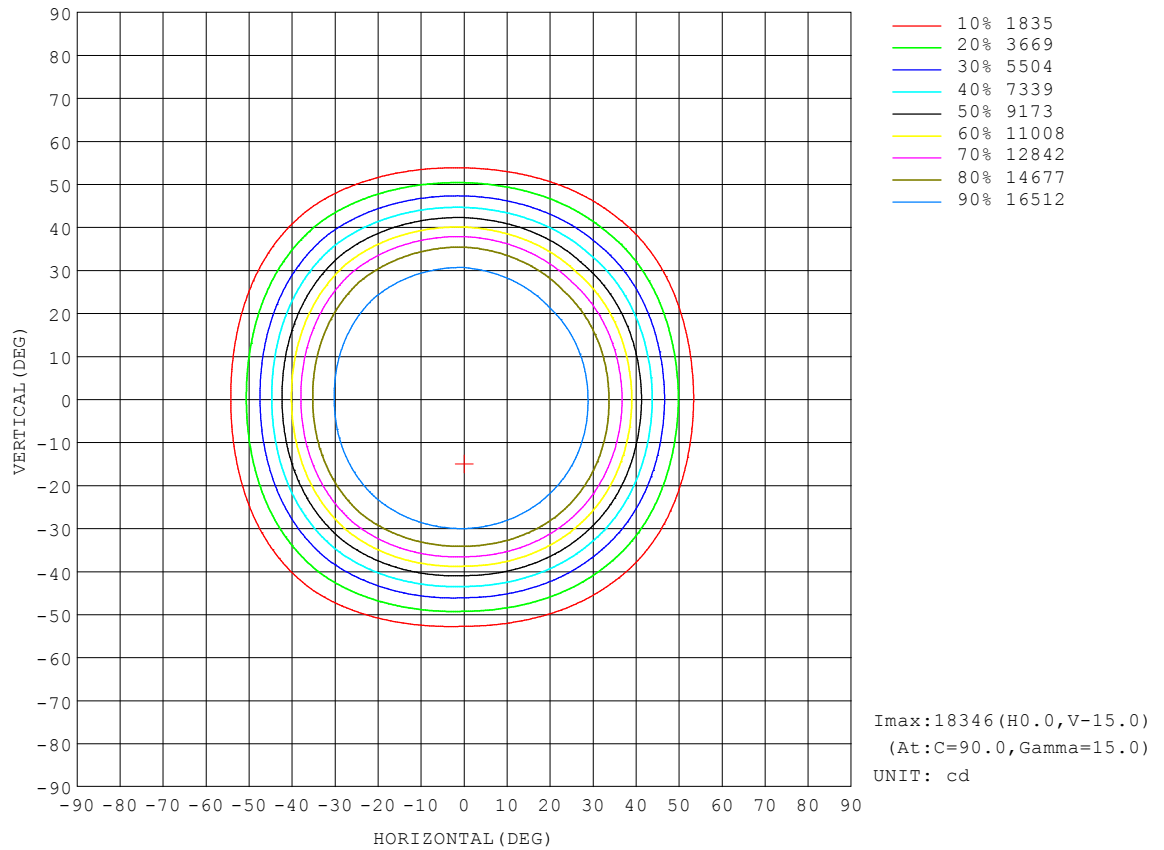
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	68	63	76	68	63	75	68	63	59
0.80	86	78	73	85	78	73	83	77	73	68
1.00	92	85	81	91	85	80	90	85	80	75
1.25	98	91	87	97	91	86	94	89	86	80
1.50	101	95	91	100	94	91	97	93	89	84
2.00	105	100	96	104	99	95	101	97	94	88
2.50	107	103	99	106	101	98	102	99	96	89
3.00	109	105	102	107	104	101	104	101	98	91
4.00	112	108	105	110	107	104	106	103	101	93
5.00	113	110	108	111	108	106	107	105	103	94
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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

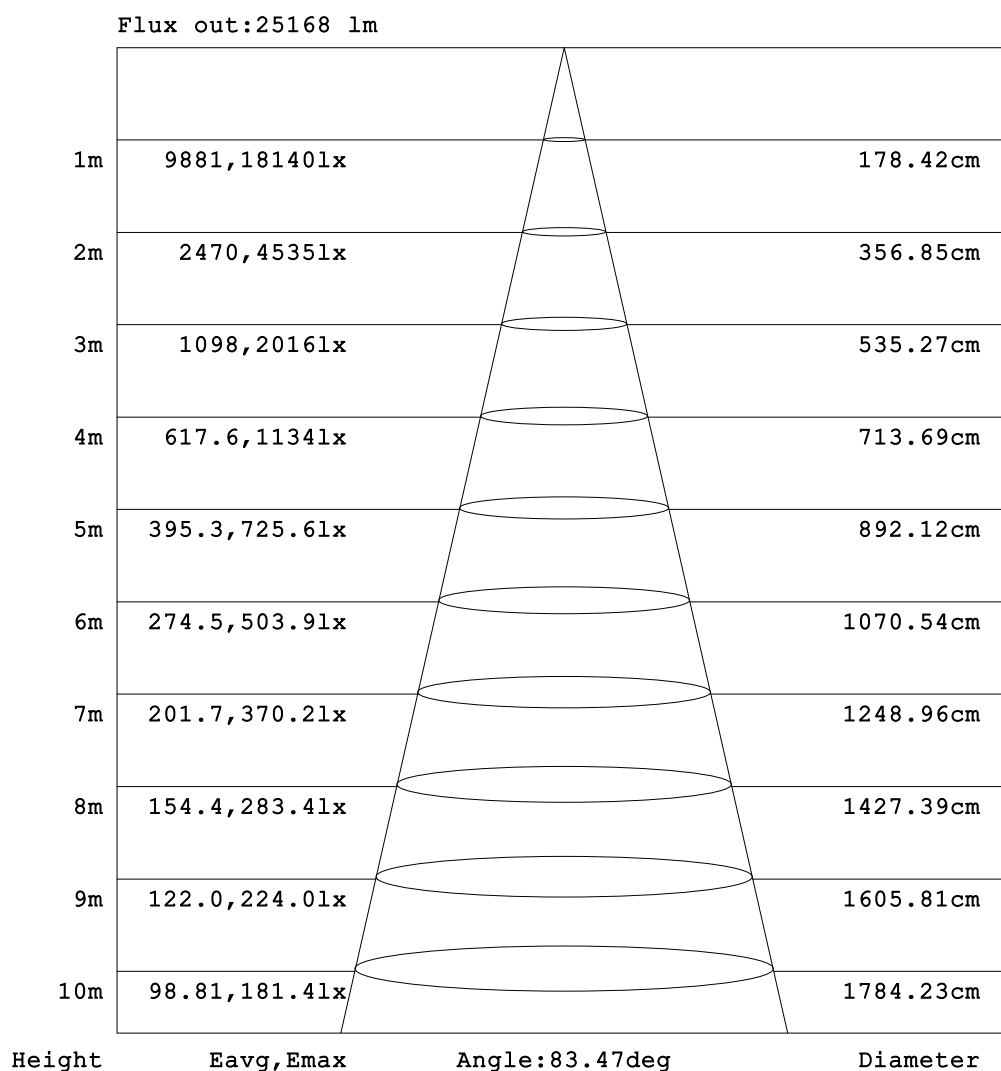


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-31

☐ 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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

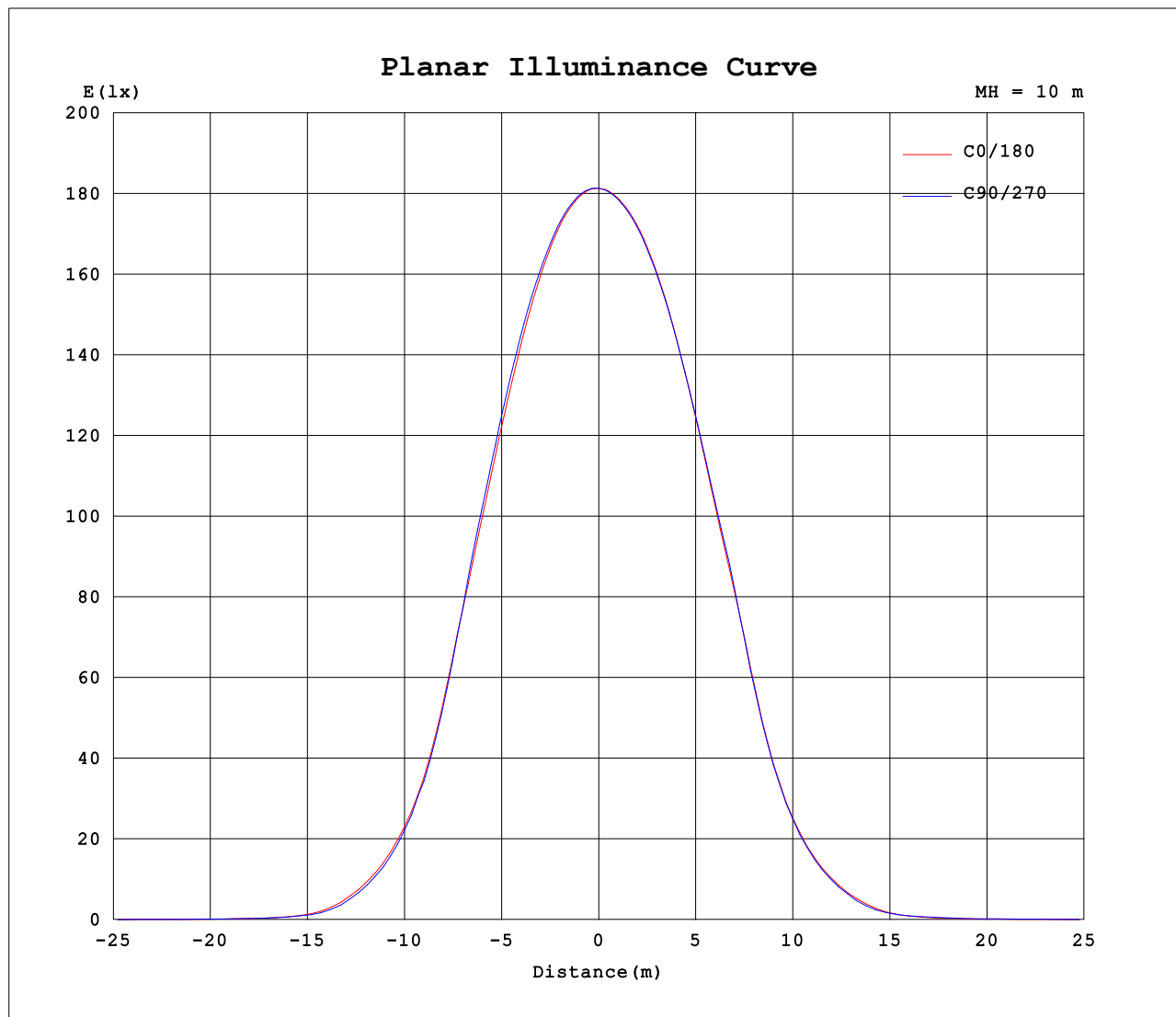


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.694A P:203.9W PF:0.9978 Freq:59.97Hz Lamp Flux:30994.8x1 lm								
NAME: H17XL-RAL-200W-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	1813	1814	1813	1813	1813	1814	1813	1813										
5	1818	1822	1821	1818	1814	1812	1812	1815										
10	1824	1830	1831	1826	1821	1818	1817	1819										
15	1821	1830	1835	1829	1826	1824	1821	1816										
20	1798	1812	1824	1816	1813	1817	1810	1795										
25	1738	1754	1774	1770	1765	1778	1768	1738										
30	1615	1629	1653	1663	1657	1682	1669	1615										
35	1402	1402	1405	1480	1478	1511	1495	1386										
40	1022	997	1003	1100	1112	1164	1103	989										
45	652	619	629	706	713	763	706	627										
50	359	316	325	396	401	431	387	334										
55	113	86.8	95.1	148	148	158	128	104										
60	34.7	30.2	34.3	40.9	40.0	49.7	47.3	36.5										
65	15.0	14.2	16.9	17.5	16.6	22.0	24.0	18.3										
70	9.53	8.90	10.6	10.7	9.77	13.9	15.9	12.0										
75	5.99	5.49	6.60	6.62	6.05	8.79	10.1	7.60										
80	3.54	3.19	3.90	3.98	3.54	5.20	5.91	4.41										
85	1.61	1.38	1.64	1.95	1.66	2.45	2.58	1.83										
90	0.74	0.65	0.67	0.68	0.57	0.60	0.66	0.69										
95	0.86	0.86	0.84	0.75	0.68	0.66	0.71	0.80										
100	1.24	1.25	1.22	1.08	1.01	0.96	1.01	1.12										
105	1.76	1.79	1.75	1.57	1.50	1.41	1.47	1.60										
110	2.44	2.47	2.45	2.20	2.15	2.03	2.12	2.24										
115	3.27	3.28	3.30	2.98	2.96	2.78	2.93	3.02										
120	4.23	4.19	4.28	3.87	3.93	3.68	3.91	3.94										
125	5.25	5.11	5.33	4.79	4.98	4.63	4.96	4.89										
130	6.33	6.04	6.42	5.73	6.11	5.61	6.09	5.88										
135	7.27	7.05	7.34	6.73	7.14	6.63	7.19	6.89										
140	8.10	8.13	8.18	7.82	8.14	7.78	8.18	8.07										
145	8.90	9.04	8.99	8.76	9.03	8.84	9.08	9.12										
150	9.69	9.86	9.82	9.61	9.95	9.81	9.97	10.1										
155	10.6	10.7	10.8	10.5	10.9	10.7	10.9	11.1										
160	11.7	11.7	11.8	11.5	12.0	11.7	11.9	12.0										
165	12.8	12.8	12.8	12.5	13.0	12.8	13.0	13.0										
170	13.7	13.7	13.8	13.5	13.9	13.7	13.9	13.9										
175	14.6	14.5	14.6	14.4	14.7	14.5	14.6	14.6										
180	15.0	14.8	14.9	14.8	15.0	14.8	14.9	14.8										

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: