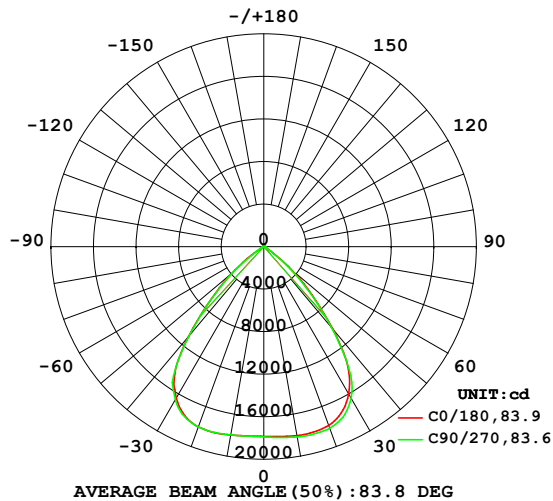


LUMINAIRE PHOTOMETRIC TEST REPORT

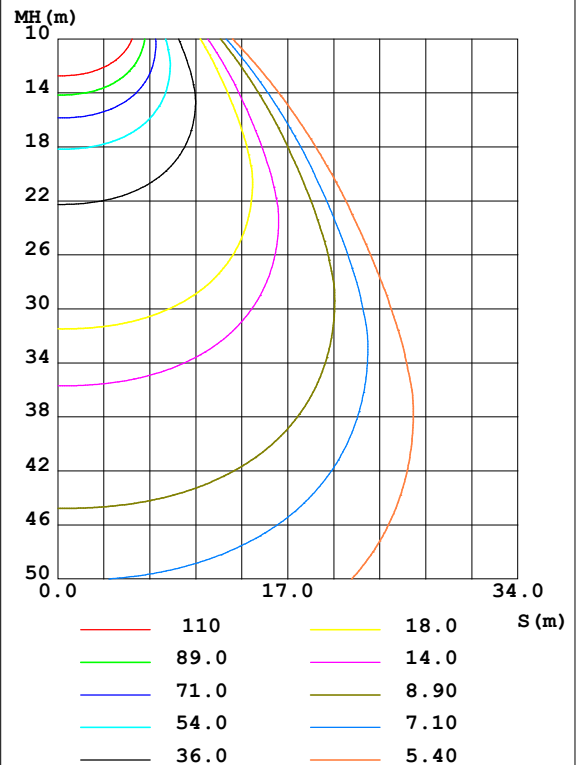
Test:U:120.6V I:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm		
NAME: H17XL-RAL-200W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 157.53 lm/W			
MODEL		Imax(cd)	18242	S/MH(C0/180)	1.23
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	30732	□ UP,DN(C0-180)	0.5,48.7
NOMINAL FLUX(lm)	30732.1	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	1804	1812	1816	1812	1799	1795	1798	1805	0- 10	1715	1715	5.58,5.58
20	1787	1800	1816	1812	1803	1807	1803	1791	10- 20	5130	6845	22.3,22.3
30	1598	1612	1643	1657	1646	1675	1664	1604	20- 30	8039	14884	48.4,48.4
40	1006	981.2	991.0	1090	1097	1150	1093	978.3	30- 40	8699	23584	76.7,76.7
50	352.2	312.1	323.3	392.1	398.0	427.7	381.7	329.4	40- 50	5207	28791	93.7,93.7
60	33.85	29.58	33.74	39.98	38.70	48.51	46.22	35.75	50- 60	1337	30128	98,98
70	9.354	8.760	10.53	10.50	9.503	13.65	15.62	11.79	60- 70	198.1	30326	98.7,98.7
80	3.471	3.140	3.849	3.908	3.442	5.089	5.808	4.319	70- 80	76.35	30402	98.9,98.9
90	0.7310	0.6367	0.6563	0.6749	0.5549	0.5840	0.6509	0.6731	80- 90	21.71	30424	99,99
100	1.221	1.236	1.206	1.072	0.9985	0.9470	0.9945	1.113	90-100	8.614	30433	99,99
110	2.407	2.445	2.425	2.180	2.124	2.001	2.096	2.228	100-110	17.05	30450	99.1,99.1
120	4.179	4.153	4.243	3.831	3.882	3.640	3.879	3.919	110-120	30.26	30480	99.2,99.2
130	6.254	5.989	6.359	5.679	6.039	5.564	6.022	5.853	120-130	44.26	30524	99.3,99.3
140	8.010	8.053	8.115	7.754	8.044	7.716	8.119	8.030	130-140	53.79	30578	99.5,99.5
150	9.592	9.764	9.741	9.534	9.846	9.728	9.886	10.05	140-150	55.58	30634	99.7,99.7
160	11.56	11.62	11.70	11.37	11.83	11.64	11.83	11.97	150-160	49.25	30683	99.8,99.8
170	13.61	13.56	13.68	13.42	13.79	13.59	13.80	13.80	160-170	35.72	30719	100,100
180	14.82	14.66	14.84	14.72	14.80	14.67	14.82	14.73	170-180	13.51	30732	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 26732 lm

%lum = 87.0%

%lamp = 87.0%

Conical surface Flux(120deg): 30128 lm

%lum = 98.0%

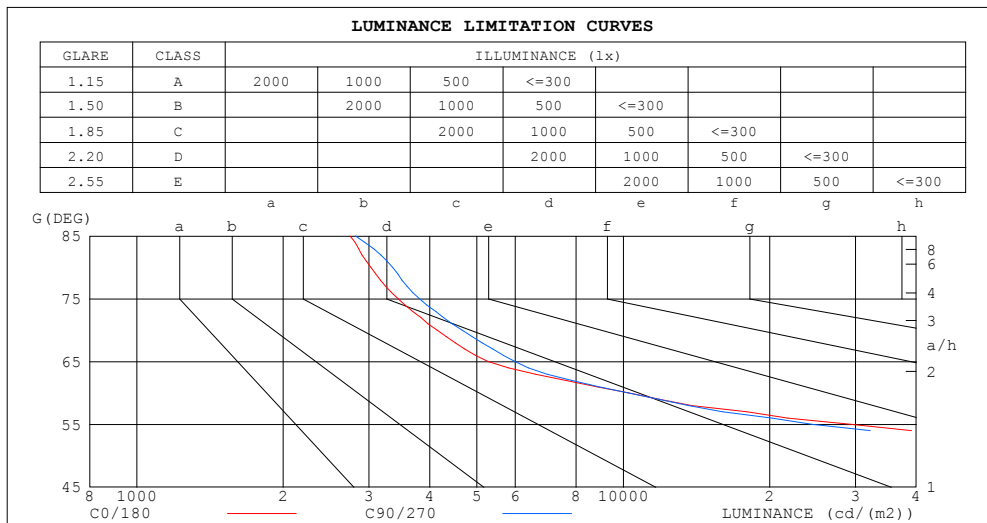
%lamp = 98.0%

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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm		
NAME: H17XL-RAL-200W-4K	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	2742	2815
80	3029	3358
75	3445	3811
70	4144	4665
65	5274	5992
60	10257	10224
55	29235	24348
50	83010	76216
45	137998	133074

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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm		
NAME: H17XL-RAL-200W-4K	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	.172 .099 .032	.161 .093 .030	
2.0	.200 .109 .034	.194 .107 .033	.182 .101 .031	.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	.183 .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	.149 .080 .024	
6.0	.167 .084 .024	.163 .082 .024	.156 .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	.138 .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	.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 .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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm										
NAME: H17XL-RAL-200W-4K					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	25.8	26.9	26.0	27.1	27.3	25.7	26.8	26.0	27.0	27.2
3H	25.6	26.6	25.9	26.9	27.1	25.5	26.6	25.8	26.8	27.0
4H	25.5	26.5	25.8	26.7	27.0	25.4	26.4	25.7	26.7	26.9
6H	25.4	26.3	25.7	26.6	26.9	25.3	26.3	25.7	26.5	26.8
8H	25.4	26.2	25.7	26.5	26.8	25.3	26.2	25.6	26.4	26.7
12H	25.3	26.2	25.7	26.5	26.8	25.2	26.1	25.6	26.4	26.7
4H 2H	25.5	26.5	25.8	26.7	27.0	25.4	26.4	25.7	26.7	26.9
3H	25.3	26.2	25.7	26.5	26.8	25.3	26.1	25.6	26.4	26.7
4H	25.3	26.0	25.6	26.3	26.7	25.2	25.9	25.5	26.2	26.6
6H	25.2	25.8	25.6	26.2	26.5	25.1	25.7	25.5	26.1	26.5
8H	25.1	25.7	25.5	26.1	26.5	25.0	25.6	25.5	26.0	26.4
12H	25.1	25.6	25.5	26.0	26.4	25.0	25.5	25.4	25.9	26.4
8H 4H	25.1	25.7	25.5	26.1	26.5	25.0	25.6	25.4	26.0	26.4
6H	25.0	25.5	25.5	25.9	26.4	24.9	25.4	25.4	25.9	26.3
8H	25.0	25.4	25.4	25.8	26.3	24.9	25.3	25.4	25.8	26.2
12H	24.9	25.3	25.4	25.8	26.3	24.9	25.2	25.3	25.7	26.2
12H 4H	25.1	25.6	25.5	26.0	26.4	25.0	25.5	25.4	25.9	26.3
6H	25.0	25.4	25.4	25.8	26.3	24.9	25.3	25.4	25.8	26.2
8H	24.9	25.3	25.4	25.8	26.2	24.9	25.2	25.3	25.7	26.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -10.9					+ 2.5 / -10.9				
1.5H	+ 3.2 / - 9.1					+ 3.3 / - 9.1				
2.0H	+ 6.0 / -12.1					+ 6.1 / -11.5				

CIE Pub.117, 30732 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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm		
NAME: H17XL-RAL-200W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

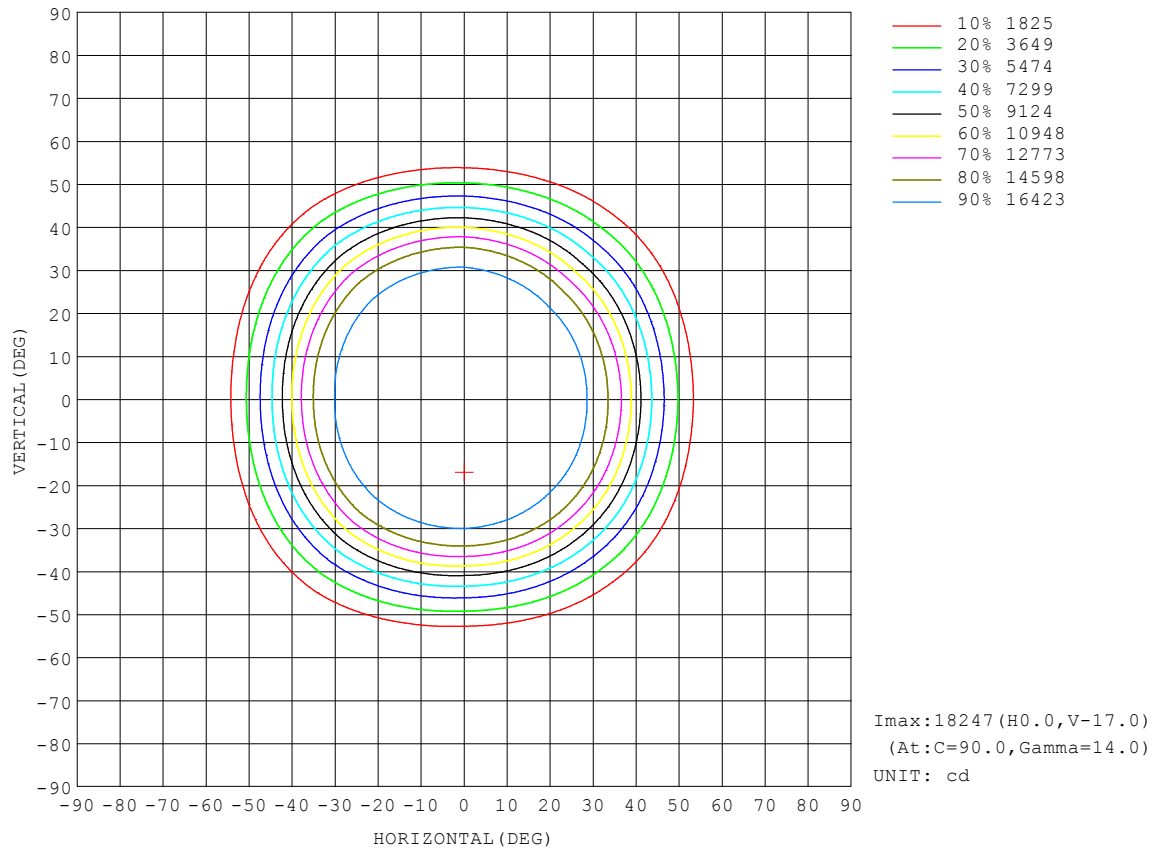
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	68	64	76	68	63	75	68	63	59
0.80	86	78	73	85	78	73	84	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	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	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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm		
NAME: H17XL-RAL-200W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

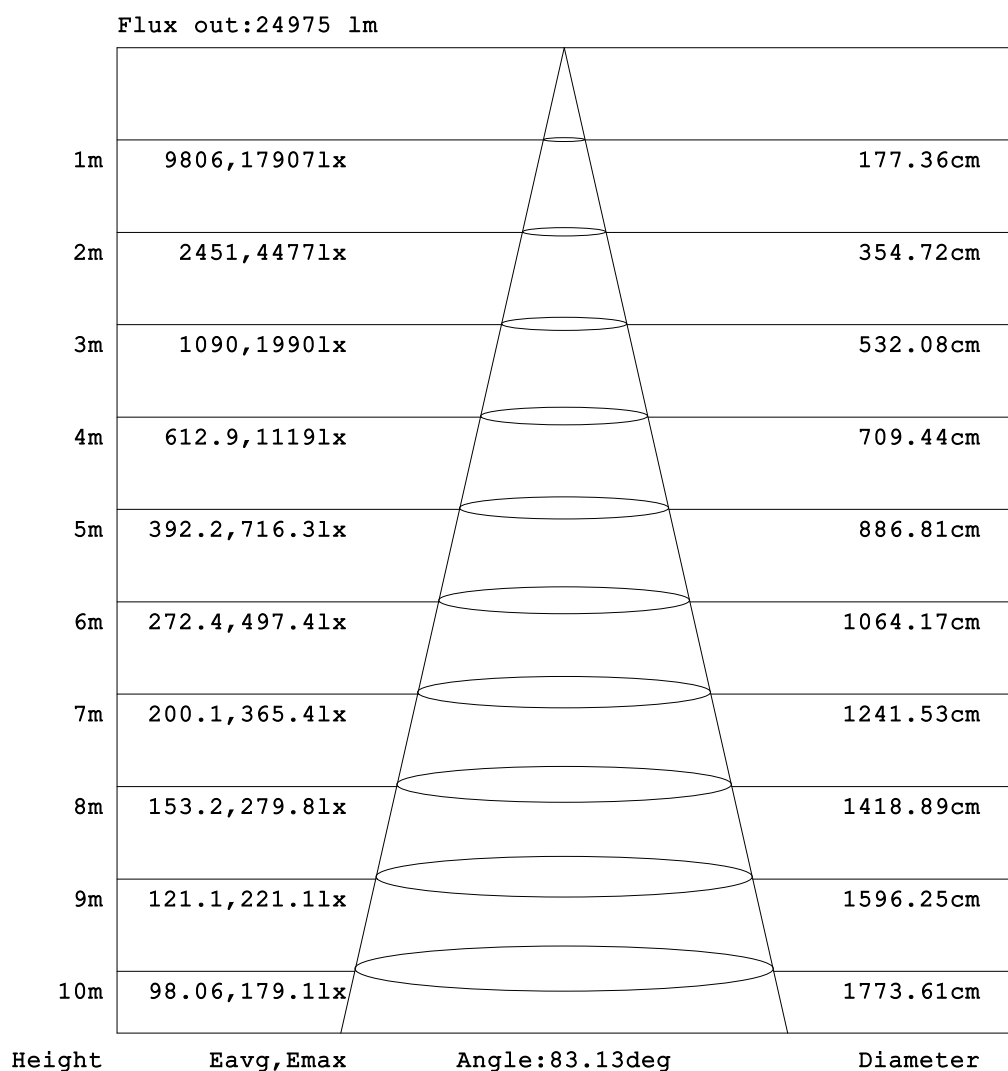


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-31

☐ 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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm		
NAME: H17XL-RAL-200W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

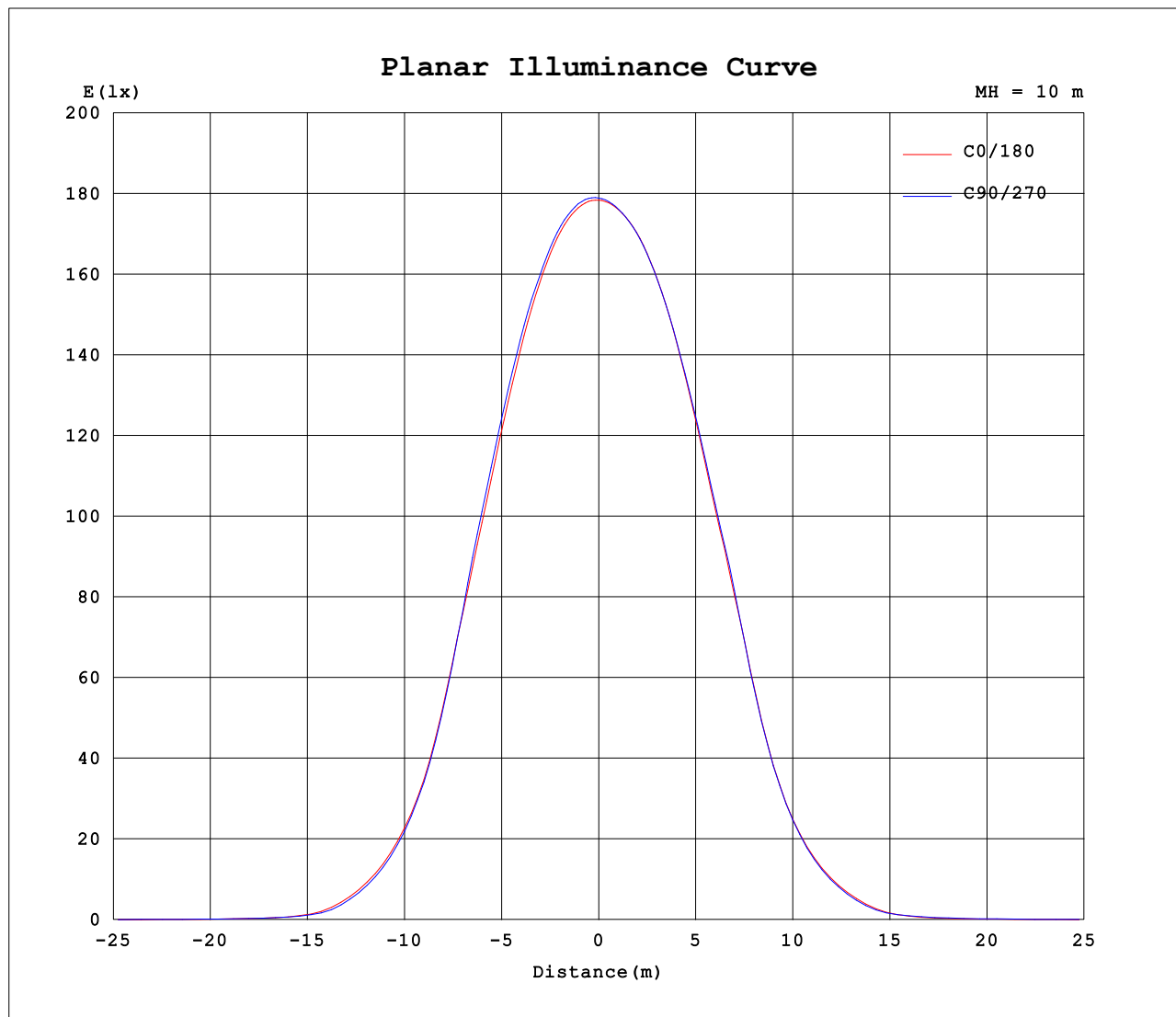


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.621A P:195.1W PF:0.9978 Freq:59.98Hz Lamp Flux:30732.1x1 lm								
NAME: H17XL-RAL-200W-4K					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	1784	1787	1789	1791	1784	1787	1789	1791										
5	1792	1799	1801	1798	1787	1784	1788	1795										
10	1804	1812	1816	1812	1799	1795	1798	1805										
15	1806	1816	1823	1821	1809	1808	1808	1809										
20	1787	1800	1816	1812	1803	1807	1803	1791										
25	1725	1741	1766	1767	1756	1771	1764	1732										
30	1598	1612	1643	1657	1646	1675	1664	1604										
35	1383	1381	1391	1468	1463	1499	1484	1370										
40	1006	981	991	1090	1097	1150	1093	978										
45	644	606	621	704	705	756	700	622										
50	352	312	323	392	398	428	382	329										
55	111	85.4	92.2	143	146	161	128	100.0										
60	33.8	29.6	33.7	40.0	38.7	48.5	46.2	35.8										
65	14.7	14.0	16.7	17.2	16.1	21.6	23.6	18.0										
70	9.35	8.76	10.5	10.5	9.50	13.6	15.6	11.8										
75	5.88	5.40	6.51	6.50	5.88	8.60	9.91	7.46										
80	3.47	3.14	3.85	3.91	3.44	5.09	5.81	4.32										
85	1.58	1.35	1.62	1.92	1.62	2.40	2.53	1.79										
90	0.73	0.64	0.66	0.67	0.55	0.58	0.65	0.67										
95	0.85	0.85	0.83	0.74	0.67	0.65	0.70	0.79										
100	1.22	1.24	1.21	1.07	1.00	0.95	0.99	1.11										
105	1.74	1.77	1.73	1.55	1.48	1.40	1.46	1.59										
110	2.41	2.45	2.43	2.18	2.12	2.00	2.10	2.23										
115	3.23	3.25	3.27	2.95	2.92	2.75	2.90	3.00										
120	4.18	4.15	4.24	3.83	3.88	3.64	3.88	3.92										
125	5.19	5.07	5.28	4.75	4.92	4.58	4.91	4.87										
130	6.25	5.99	6.36	5.68	6.04	5.56	6.02	5.85										
135	7.19	6.99	7.28	6.67	7.05	6.58	7.08	6.86										
140	8.01	8.05	8.11	7.75	8.04	7.72	8.12	8.03										
145	8.80	8.95	8.92	8.69	8.93	8.76	9.00	9.06										
150	9.59	9.76	9.74	9.53	9.85	9.73	9.89	10.0										
155	10.5	10.6	10.7	10.4	10.8	10.6	10.8	11.0										
160	11.6	11.6	11.7	11.4	11.8	11.6	11.8	12.0										
165	12.6	12.6	12.8	12.4	12.9	12.7	12.9	13.0										
170	13.6	13.6	13.7	13.4	13.8	13.6	13.8	13.8										
175	14.4	14.4	14.5	14.3	14.5	14.4	14.5	14.5										
180	14.8	14.7	14.8	14.7	14.8	14.7	14.8	14.7										

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: