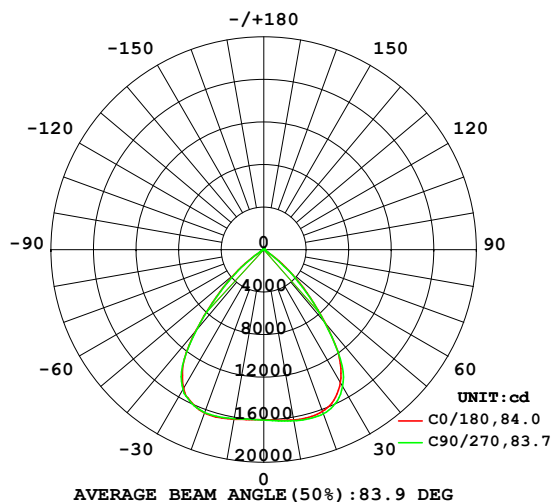


LUMINAIRE PHOTOMETRIC TEST REPORT

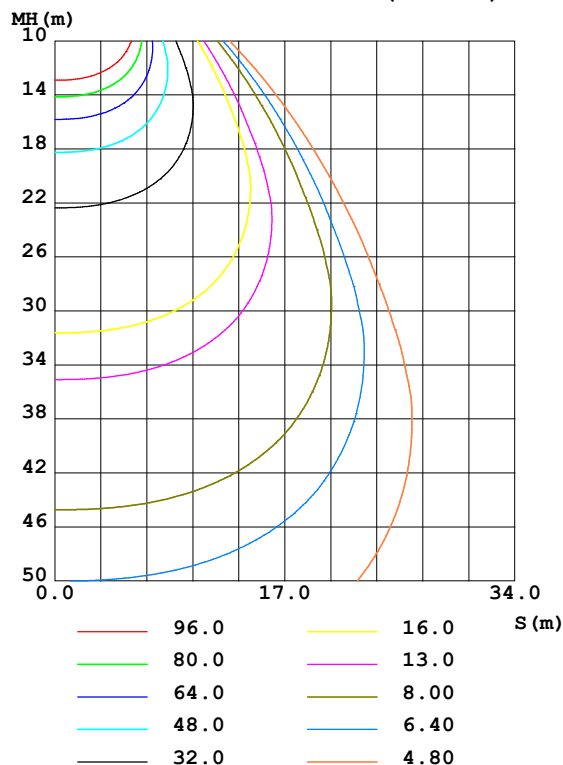
Test:U:120.6V I:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.53 lm/W			
MODEL		I _{max} (cd)	16473	S/MH(C0/180)	1.23
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	27719	□ UP,DN(C0-180)	0.5,48.7
NOMINAL FLUX(lm)	27718.9	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	1625	1631	1634	1628	1619	1610	1613	1622	0- 10	1540	1540	5.55,5.55
20	1618	1627	1642	1639	1634	1632	1629	1620	10- 20	4628	6168	22.3,22.3
30	1442	1467	1483	1514	1507	1515	1520	1448	20- 30	7283	13451	48.5,48.5
40	901.1	878.3	892.3	981.3	988.9	1033	980.8	881.0	30- 40	7844	21295	76.8,76.8
50	314.9	280.4	292.7	351.3	361.7	384.7	339.4	295.4	40- 50	4688	25983	93.7,93.7
60	29.87	26.36	30.33	35.31	34.37	42.99	40.78	31.72	50- 60	1194	27177	98,98
70	8.333	7.843	9.488	9.365	8.454	12.14	13.87	10.53	60- 70	176.5	27354	98.7,98.7
80	3.095	2.810	3.463	3.489	3.066	4.532	5.165	3.863	70- 80	68.15	27422	98.9,98.9
90	0.6514	0.5698	0.5870	0.6029	0.4958	0.5201	0.5788	0.6009	80- 90	19.36	27441	99,99
100	1.099	1.113	1.080	0.9634	0.8958	0.8482	0.8944	0.9981	90-100	7.719	27449	99,99
110	2.172	2.204	2.177	1.963	1.908	1.795	1.890	2.003	100-110	15.33	27464	99.1,99.1
120	3.771	3.750	3.814	3.454	3.496	3.271	3.490	3.533	110-120	27.24	27492	99.2,99.2
130	5.645	5.410	5.718	5.124	5.437	5.012	5.432	5.280	120-130	39.88	27531	99.3,99.3
140	7.232	7.265	7.309	6.983	7.258	6.957	7.316	7.238	130-140	48.49	27580	99.5,99.5
150	8.663	8.805	8.776	8.584	8.888	8.729	8.913	9.067	140-150	50.11	27630	99.7,99.7
160	10.44	10.48	10.54	10.25	10.69	10.50	10.65	10.79	150-160	44.39	27674	99.8,99.8
170	12.30	12.24	12.34	12.10	12.46	12.27	12.46	12.44	160-170	32.24	27707	100,100
180	13.38	13.22	13.38	13.27	13.38	13.23	13.37	13.28	170-180	12.19	27719	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 24130 lm

%lum = 87.1%

%lamp = 87.1%

Conical surface Flux(120deg): 27177 lm

%lum = 98.0%

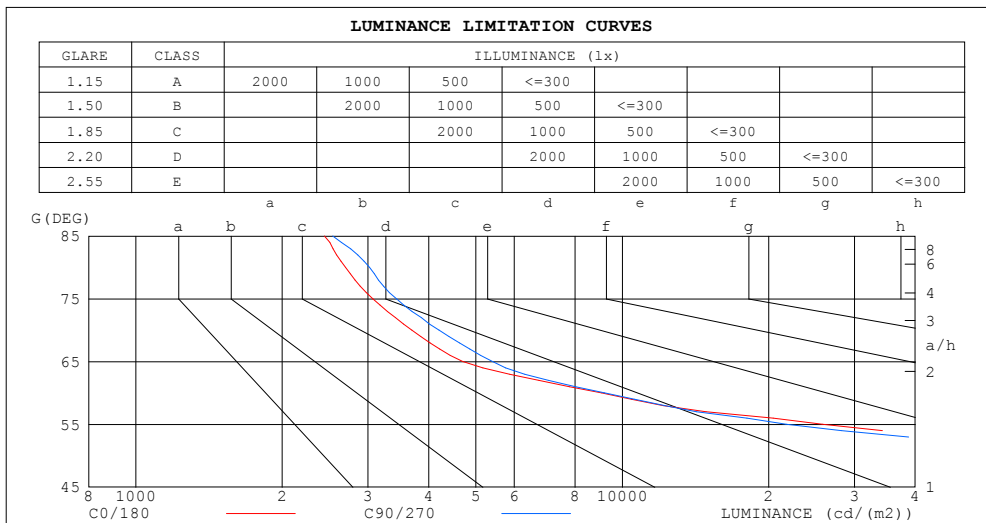
%lamp = 98.0%

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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 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	2442	2538
80	2700	3021
75	3070	3432
70	3692	4203
65	4701	5407
60	9051	9192
55	25767	21712
50	74233	68997
45	123735	119822

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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 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	.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	.167 .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 .024	.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 .007	
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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 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	25.4	26.5	25.6	26.7	26.9	25.3	26.5	25.6	26.7	26.9
3H	25.2	26.2	25.5	26.5	26.7	25.2	26.2	25.4	26.4	26.7
4H	25.1	26.1	25.4	26.3	26.6	25.1	26.0	25.4	26.3	26.5
6H	25.0	25.9	25.3	26.2	26.5	25.0	25.9	25.3	26.2	26.4
8H	25.0	25.8	25.3	26.1	26.4	24.9	25.8	25.3	26.1	26.4
12H	24.9	25.8	25.3	26.1	26.4	24.9	25.7	25.2	26.0	26.3
4H 2H	25.1	26.1	25.4	26.3	26.6	25.1	26.1	25.4	26.3	26.6
3H	24.9	25.8	25.3	26.1	26.4	24.9	25.7	25.2	26.0	26.3
4H	24.9	25.6	25.2	25.9	26.3	24.8	25.6	25.2	25.9	26.2
6H	24.8	25.4	25.2	25.8	26.2	24.7	25.4	25.1	25.7	26.1
8H	24.7	25.3	25.1	25.7	26.1	24.7	25.3	25.1	25.7	26.0
12H	24.7	25.2	25.1	25.6	26.0	24.6	25.2	25.1	25.6	26.0
8H 4H	24.7	25.3	25.1	25.7	26.1	24.7	25.3	25.1	25.7	26.0
6H	24.6	25.1	25.1	25.5	26.0	24.6	25.1	25.0	25.5	25.9
8H	24.6	25.0	25.0	25.4	25.9	24.5	25.0	25.0	25.4	25.9
12H	24.5	24.9	25.0	25.4	25.9	24.5	24.9	25.0	25.3	25.8
12H 4H	24.7	25.2	25.1	25.6	26.0	24.6	25.2	25.1	25.6	26.0
6H	24.6	25.0	25.0	25.4	25.9	24.5	25.0	25.0	25.4	25.9
8H	24.5	24.9	25.0	25.4	25.9	24.5	24.9	25.0	25.3	25.8
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -11.0					+ 2.5 / -11.0				
1.5H	+ 3.2 / - 9.0					+ 3.3 / - 9.2				
2.0H	+ 6.1 / -12.1					+ 6.1 / -11.6				

CIE Pub.117, 27719 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 11.5$)

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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

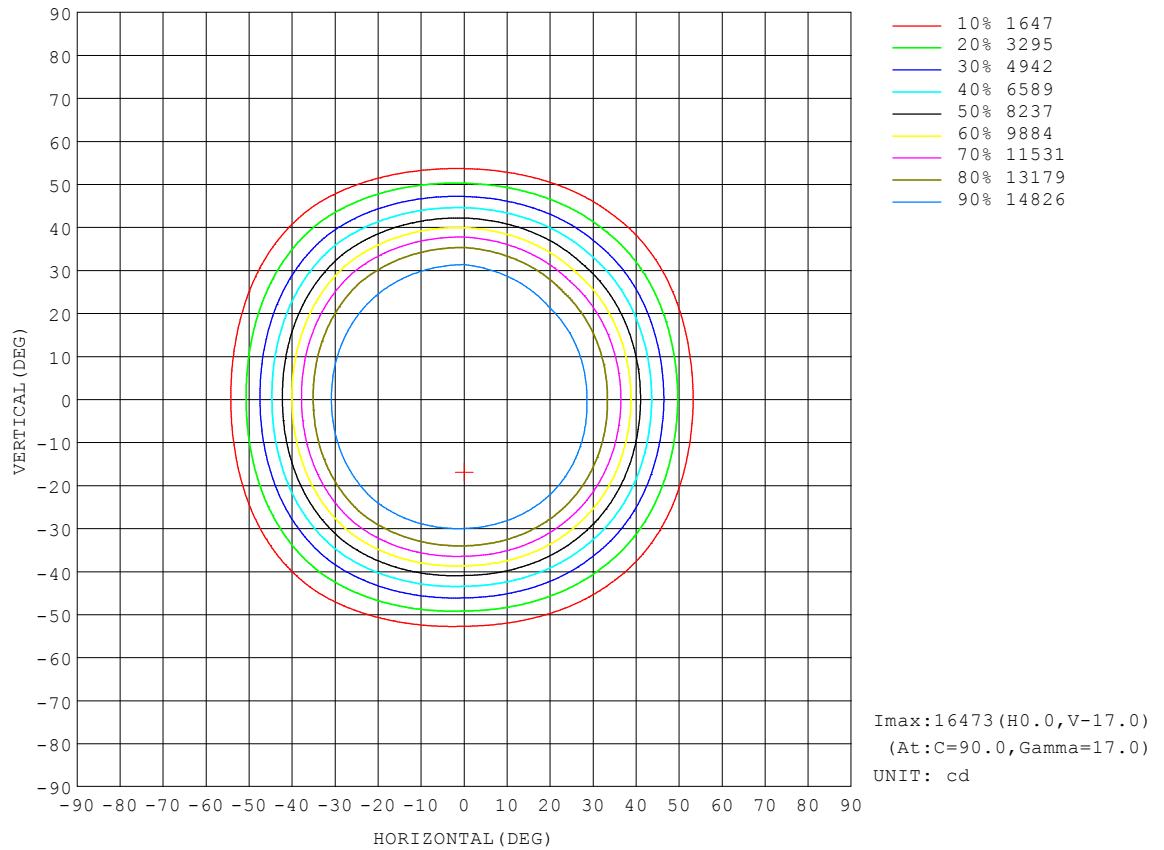
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	64	76	68	64	75	68	63	59
0.80	86	78	73	85	78	73	84	77	73	68
1.00	93	85	81	92	85	80	90	85	80	75
1.25	98	91	87	97	91	86	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	89
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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

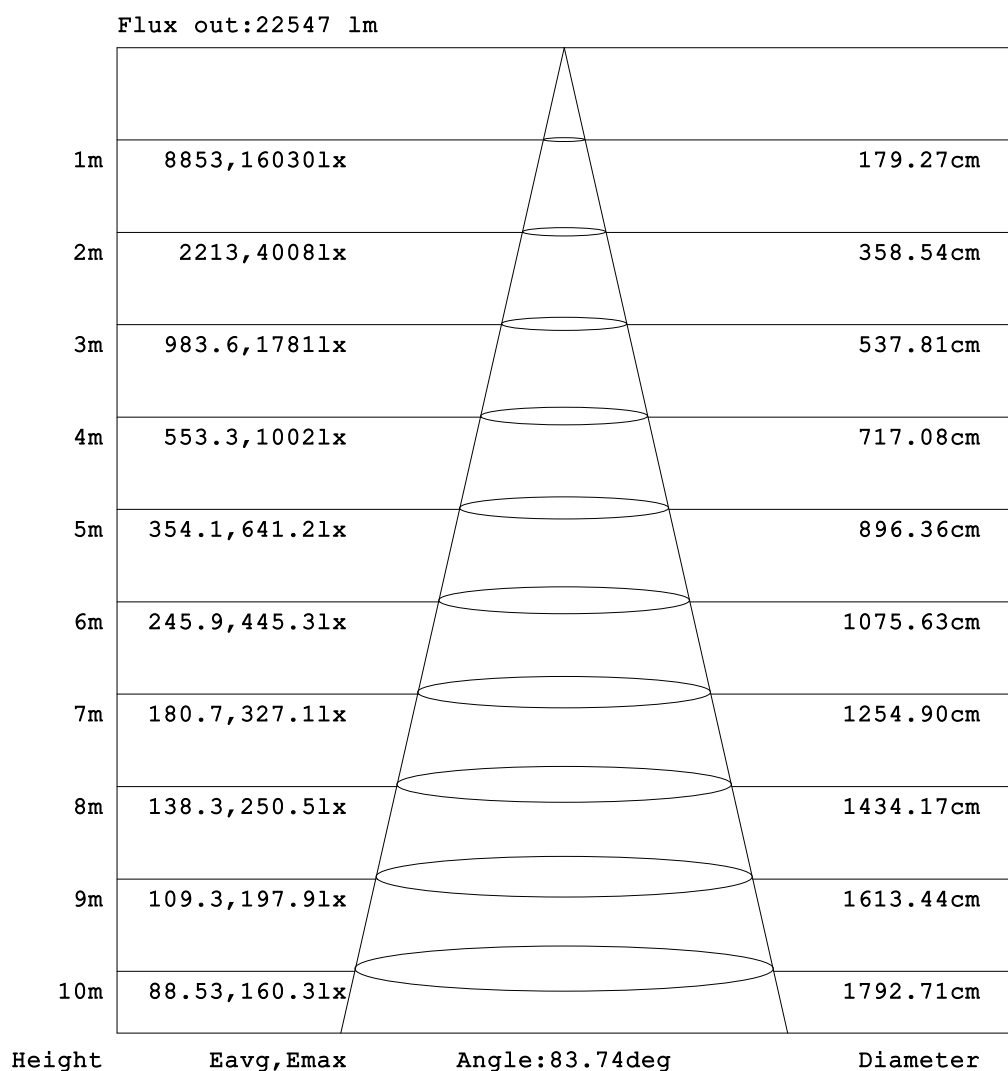


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-31

☐ 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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 lm		
NAME: H17XL-RAL-200W-5K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

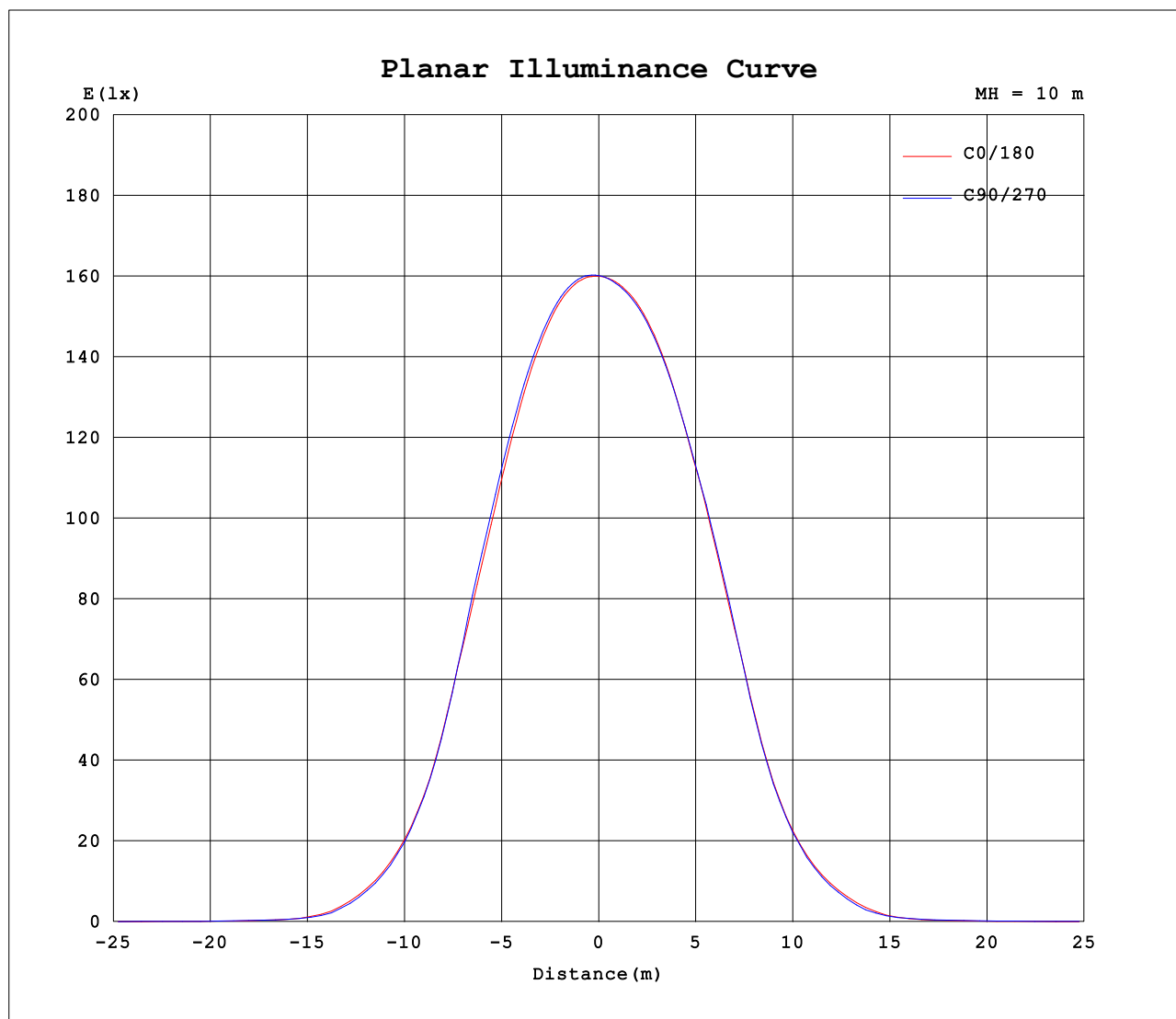


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.675A P:201.5W PF:0.9978 Freq:59.96Hz Lamp Flux:27718.9x1 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	1600	1600	1602	1602	1600	1600	1602	1602										
5	1610	1614	1615	1611	1604	1598	1601	1608										
10	1625	1631	1634	1628	1619	1610	1613	1622										
15	1633	1639	1646	1642	1635	1628	1628	1631										
20	1618	1627	1642	1639	1634	1632	1629	1620										
25	1562	1574	1596	1599	1593	1602	1597	1567										
30	1442	1467	1483	1514	1507	1515	1520	1448										
35	1241	1237	1254	1323	1322	1351	1335	1232										
40	901	878	892	981	989	1033	981	881										
45	577	540	559	637	638	684	626	562										
50	315	280	293	351	362	385	339	295										
55	97.5	76.4	82.2	124	132	148	114	87.4										
60	29.9	26.4	30.3	35.3	34.4	43.0	40.8	31.7										
65	13.1	12.5	15.1	15.8	13.9	19.2	21.0	16.1										
70	8.33	7.84	9.49	9.36	8.45	12.1	13.9	10.5										
75	5.24	4.83	5.86	5.80	5.23	7.66	8.82	6.67										
80	3.09	2.81	3.46	3.49	3.07	4.53	5.17	3.86										
85	1.40	1.21	1.46	1.71	1.45	2.13	2.24	1.59										
90	0.65	0.57	0.59	0.60	0.50	0.52	0.58	0.60										
95	0.76	0.77	0.74	0.66	0.60	0.58	0.63	0.70										
100	1.10	1.11	1.08	0.96	0.90	0.85	0.89	1.00										
105	1.57	1.59	1.56	1.39	1.33	1.25	1.31	1.43										
110	2.17	2.20	2.18	1.96	1.91	1.79	1.89	2.00										
115	2.92	2.93	2.94	2.65	2.63	2.47	2.62	2.71										
120	3.77	3.75	3.81	3.45	3.50	3.27	3.49	3.53										
125	4.68	4.58	4.75	4.28	4.42	4.13	4.42	4.39										
130	5.65	5.41	5.72	5.12	5.44	5.01	5.43	5.28										
135	6.49	6.31	6.55	6.02	6.36	5.93	6.38	6.19										
140	7.23	7.27	7.31	6.98	7.26	6.96	7.32	7.24										
145	7.94	8.07	8.03	7.82	8.06	7.91	8.11	8.19										
150	8.66	8.81	8.78	8.58	8.89	8.73	8.91	9.07										
155	9.50	9.59	9.61	9.36	9.74	9.59	9.74	9.91										
160	10.4	10.5	10.5	10.3	10.7	10.5	10.7	10.8										
165	11.4	11.4	11.5	11.2	11.7	11.4	11.6	11.7										
170	12.3	12.2	12.3	12.1	12.5	12.3	12.5	12.4										
175	13.0	12.9	13.1	12.9	13.1	12.9	13.1	13.1										
180	13.4	13.2	13.4	13.3	13.4	13.2	13.4	13.3										

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: