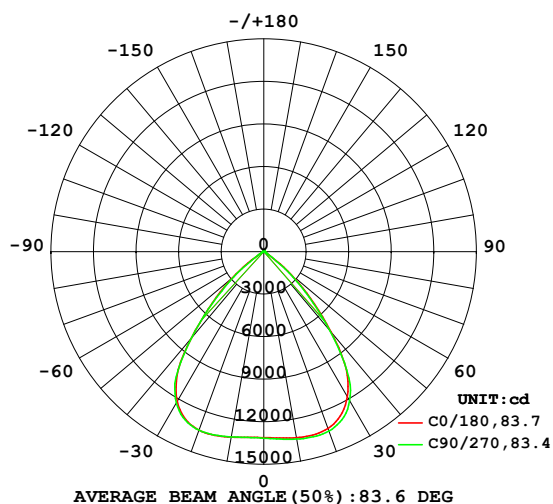


LUMINAIRE PHOTOMETRIC TEST REPORT

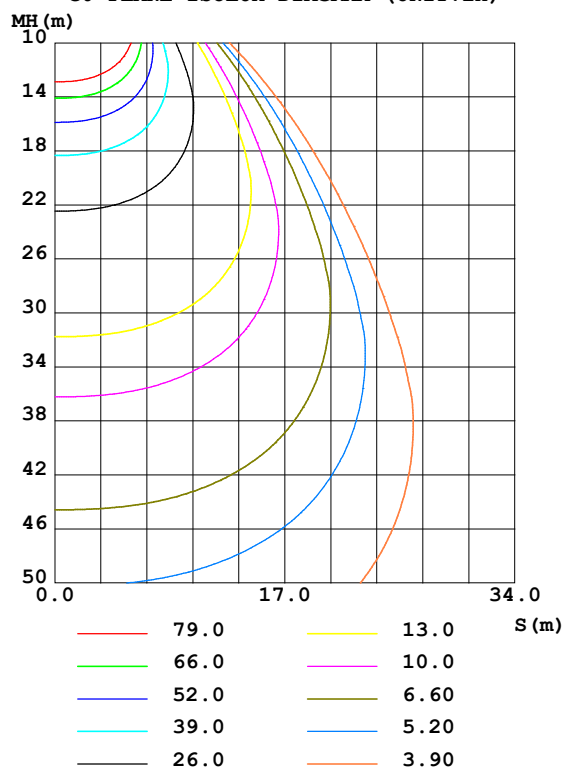
Test:U:120.6V I:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm		
NAME: H17XL-RAL-150W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.56 lm/W			
MODEL		I _{max} (cd)	13523	S/MH(C0/180)	1.22
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	22599	□ UP,DN(C0-180)	0.5,48.7
NOMINAL FLUX(lm)	22598.8	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.5,50.4
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	1332	1340	1342	1338	1328	1323	1326	1334	0- 10	1264	1264	5.59,5.59
20	1326	1335	1346	1345	1339	1342	1339	1331	10- 20	3801	5065	22.4,22.4
30	1179	1191	1213	1225	1221	1243	1232	1184	20- 30	5961	11026	48.8,48.8
40	735.6	710.8	724.4	788.2	796.0	846.4	791.8	716.6	30- 40	6374	17400	77,77
50	256.0	227.5	236.6	284.4	292.3	312.7	276.4	239.6	40- 50	3793	21192	93.8,93.8
60	24.43	21.37	24.59	28.84	27.88	34.97	33.24	25.92	50- 60	967.9	22160	98.1,98.1
70	6.734	6.313	7.630	7.542	6.801	9.791	11.17	8.475	60- 70	142.8	22303	98.7,98.7
80	2.492	2.260	2.778	2.804	2.463	3.653	4.163	3.107	70- 80	54.86	22358	98.9,98.9
90	0.5264	0.4597	0.4755	0.4882	0.3993	0.4192	0.4706	0.4857	80- 90	15.60	22374	99,99
100	0.8875	0.9031	0.8755	0.7805	0.7249	0.6858	0.7225	0.8064	90-100	6.243	22380	99,99
110	1.755	1.791	1.766	1.591	1.545	1.455	1.527	1.620	100-110	12.41	22392	99.1,99.1
120	3.059	3.045	3.102	2.801	2.828	2.652	2.828	2.854	110-120	22.07	22414	99.2,99.2
130	4.582	4.394	4.655	4.159	4.406	4.062	4.408	4.278	120-130	32.36	22447	99.3,99.3
140	5.870	5.907	5.948	5.683	5.877	5.641	5.929	5.868	130-140	39.37	22486	99.5,99.5
150	7.032	7.161	7.145	6.990	7.199	7.109	7.236	7.356	140-150	40.69	22527	99.7,99.7
160	8.470	8.523	8.575	8.338	8.663	8.517	8.659	8.742	150-160	36.06	22563	99.8,99.8
170	9.974	9.942	10.03	9.836	10.11	9.939	10.11	10.11	160-170	26.17	22589	100,100
180	10.85	10.74	10.87	10.78	10.84	10.75	10.86	10.79	170-180	9.900	22599	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 19693 lm

%lum = 87.1%

%lamp = 87.1%

Conical surface Flux(120deg): 22160 lm

%lum = 98.1%

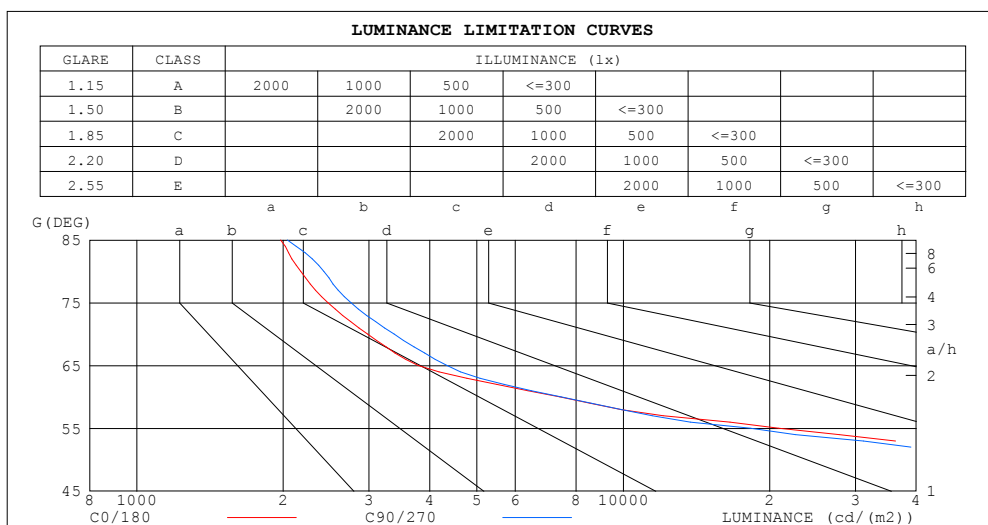
%lamp = 98.1%

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:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm		
NAME: H17XL-RAL-150W-3K	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	1974	2040
80	2174	2424
75	2473	2755
70	2983	3380
65	3789	4342
60	7404	7451
55	20869	18252
50	60334	55778
45	100222	96465

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:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm		
NAME: H17XL-RAL-150W-3K	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	.199 .109 .034	.193 .106 .033	.182 .101 .031	.171 .096 .030	.162 .091 .029	
3.0	.191 .102 .031	.186 .100 .030	.176 .096 .029	.167 .092 .028	.159 .088 .027	
4.0	.183 .095 .028	.178 .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 .083 .024	.163 .082 .024	.156 .080 .023	.150 .078 .023	.144 .076 .022	
7.0	.159 .079 .022	.156 .078 .022	.149 .076 .022	.144 .074 .021	.138 .072 .021	
8.0	.152 .074 .021	.149 .073 .021	.143 .071 .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 .007	
7.0	.128 .080 .047	.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 .021	.039 .023 .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:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm										
NAME: H17XL-RAL-150W-3K					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	24.7	25.8	24.9	26.0	26.2	24.6	25.7	24.8	25.9	26.1
3H	24.5	25.5	24.8	25.7	26.0	24.4	25.4	24.7	25.7	25.9
4H	24.4	25.4	24.7	25.6	25.9	24.3	25.3	24.6	25.5	25.8
6H	24.3	25.2	24.6	25.5	25.7	24.2	25.1	24.6	25.4	25.7
8H	24.2	25.1	24.6	25.4	25.7	24.2	25.1	24.5	25.3	25.6
12H	24.2	25.0	24.5	25.3	25.6	24.1	25.0	24.5	25.3	25.6
4H 2H	24.4	25.4	24.7	25.6	25.9	24.3	25.3	24.6	25.6	25.8
3H	24.2	25.0	24.6	25.3	25.6	24.2	25.0	24.5	25.3	25.6
4H	24.1	24.9	24.5	25.2	25.5	24.1	24.8	24.4	25.1	25.5
6H	24.0	24.7	24.4	25.0	25.4	24.0	24.6	24.4	25.0	25.4
8H	24.0	24.6	24.4	25.0	25.4	23.9	24.5	24.3	24.9	25.3
12H	23.9	24.5	24.4	24.9	25.3	23.9	24.4	24.3	24.8	25.2
8H 4H	24.0	24.6	24.4	25.0	25.4	23.9	24.5	24.3	24.9	25.3
6H	23.9	24.4	24.3	24.8	25.2	23.8	24.3	24.3	24.7	25.2
8H	23.8	24.3	24.3	24.7	25.2	23.8	24.2	24.3	24.7	25.1
12H	23.8	24.2	24.3	24.6	25.1	23.7	24.1	24.2	24.6	25.1
12H 4H	23.9	24.5	24.4	24.9	25.3	23.9	24.4	24.3	24.8	25.2
6H	23.8	24.3	24.3	24.7	25.2	23.8	24.2	24.3	24.7	25.1
8H	23.8	24.2	24.3	24.6	25.1	23.7	24.1	24.2	24.6	25.1
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -11.0					+ 2.5 / -11.0				
1.5H	+ 3.2 / - 9.1					+ 3.3 / - 9.4				
2.0H	+ 6.1 / -12.2					+ 6.1 / -11.6				

CIE Pub.117, 22599 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 10.8$)

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:

UTILIZATION FACTORS TABLE

Test:U:120.6V I:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm		
NAME: H17XL-RAL-150W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

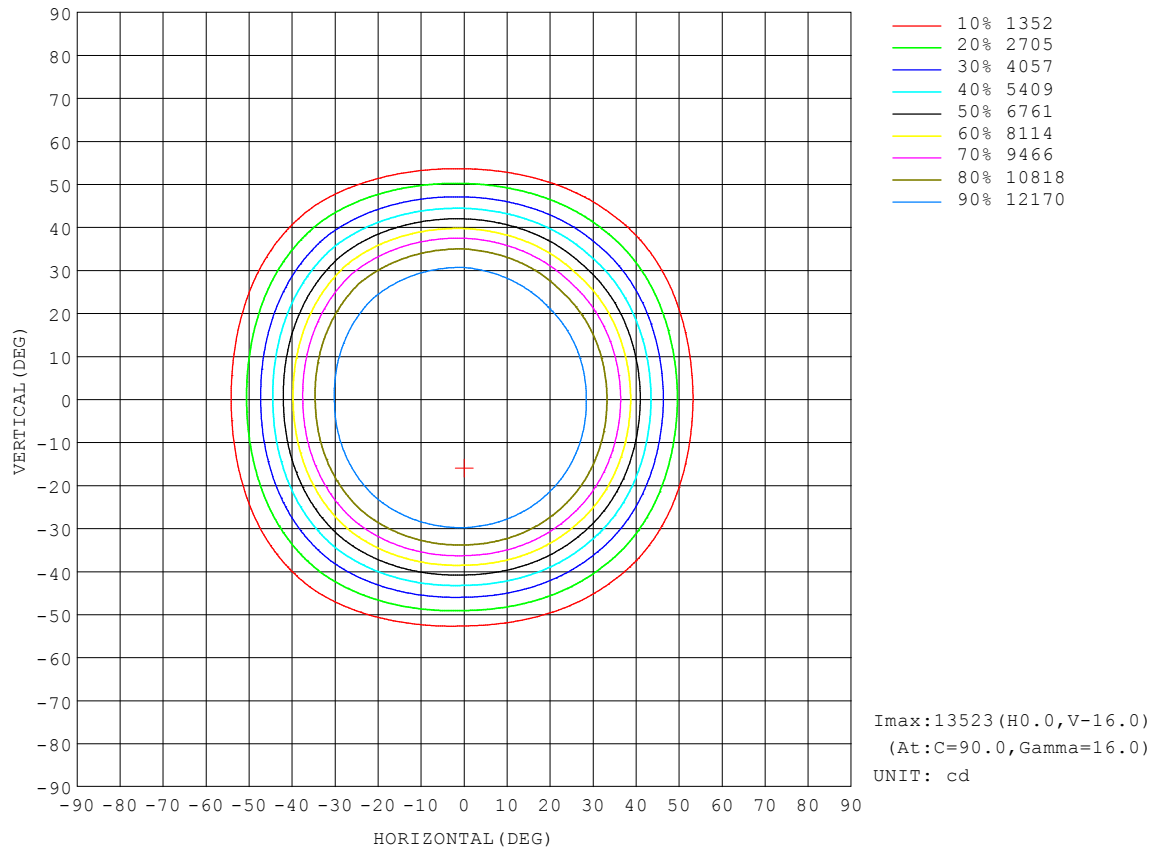
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	64	76	68	64	75	68	63	59
0.80	86	78	73	85	78	73	84	77	73	68
1.00	93	85	81	92	85	81	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	90	84
2.00	105	100	96	104	99	96	101	97	94	88
2.50	108	103	99	106	101	98	102	99	96	90
3.00	109	105	102	108	104	101	104	101	99	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:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm		
NAME: H17XL-RAL-150W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

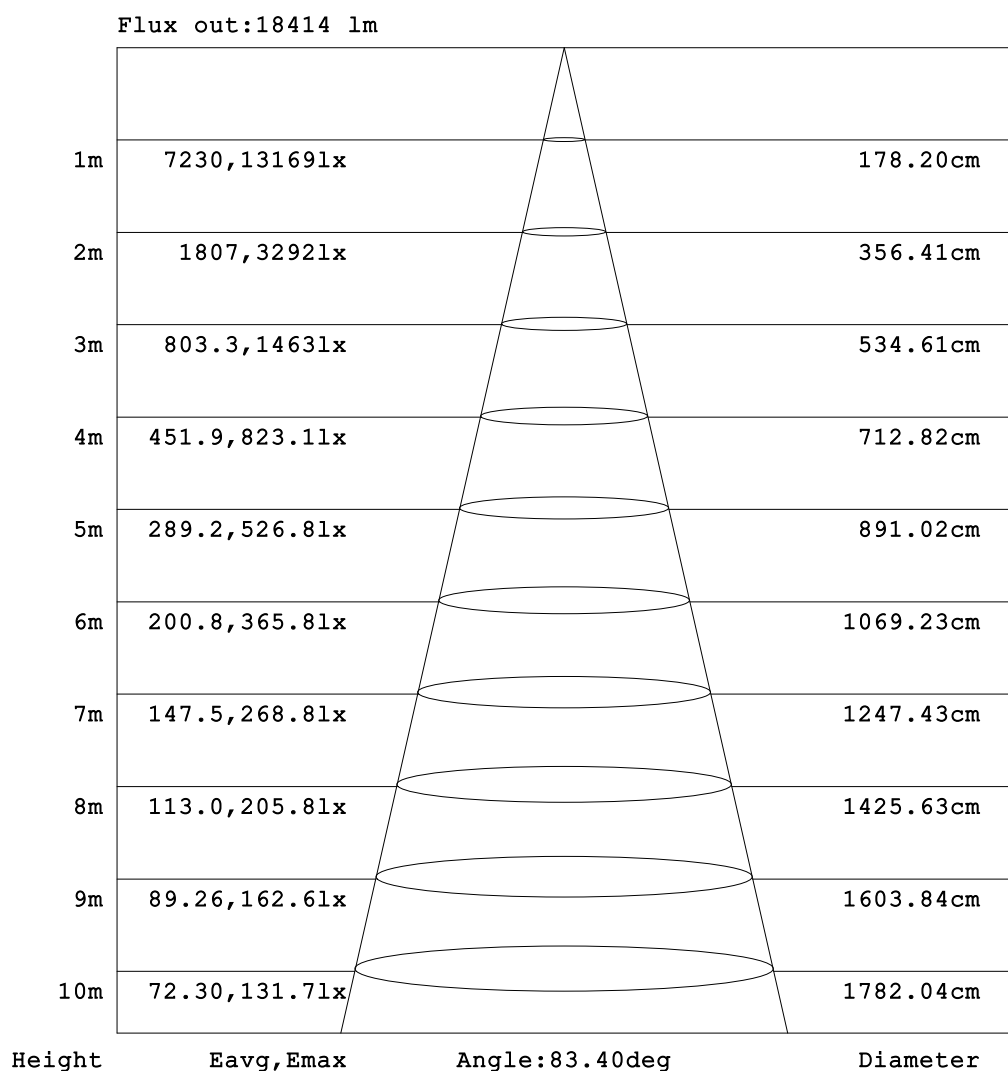


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-31

☐ 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:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm		
NAME: H17XL-RAL-150W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

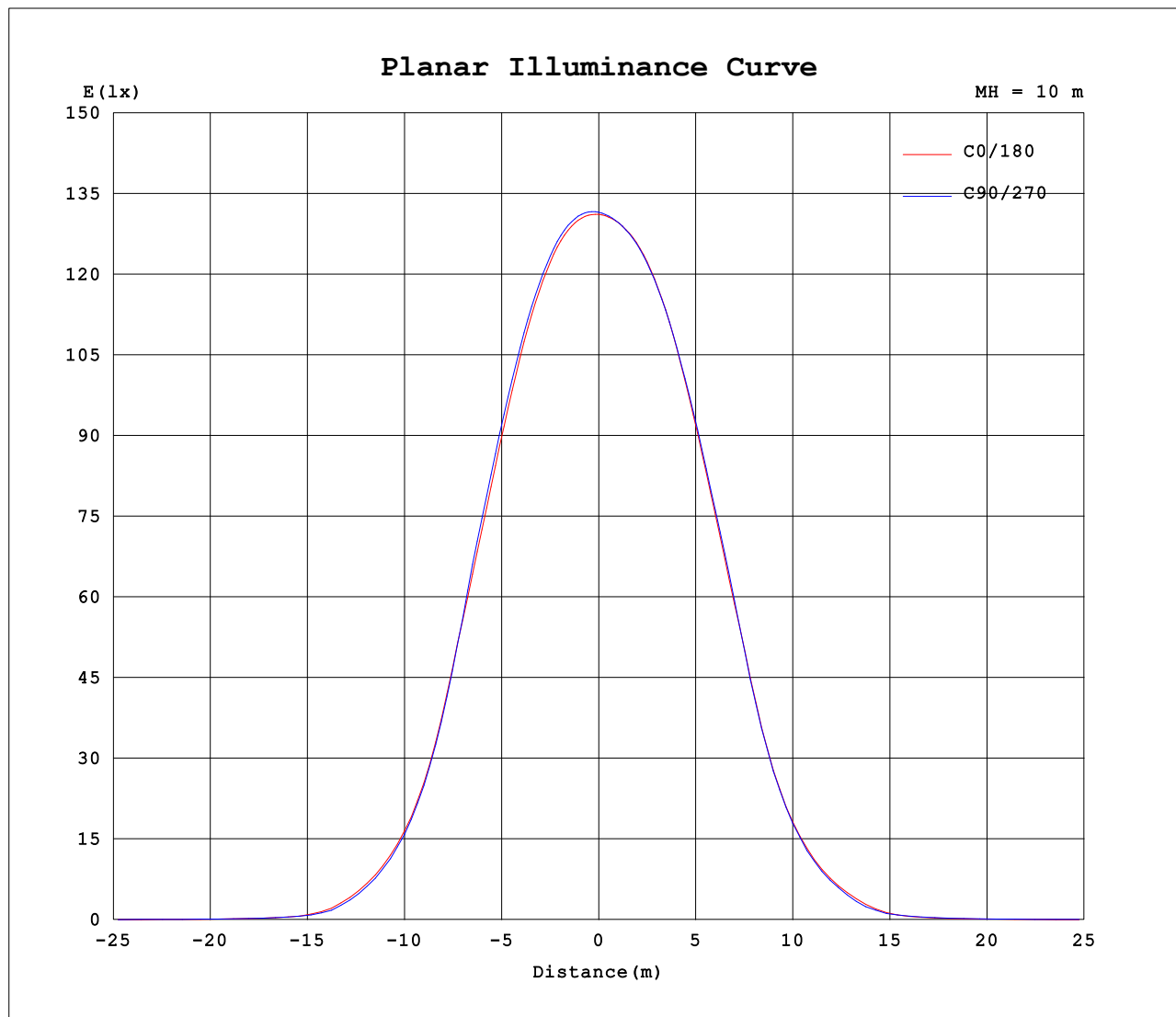


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.290A P:155.3W PF:0.9979 Freq:59.98Hz Lamp Flux:22598.8x1 lm								
NAME: H17XL-RAL-150W-3K					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	1311	1313	1315	1317	1311	1313	1315	1317										
5	1320	1325	1327	1324	1314	1312	1315	1322										
10	1332	1340	1342	1338	1328	1323	1326	1334										
15	1338	1346	1352	1350	1341	1339	1339	1341										
20	1326	1335	1346	1345	1339	1342	1339	1331										
25	1279	1290	1307	1310	1304	1317	1311	1284										
30	1179	1191	1213	1225	1221	1243	1232	1184										
35	1015	1003	1021	1067	1068	1107	1080	1004										
40	736	711	724	788	796	846	792	717										
45	468	436	450	512	514	554	507	454										
50	256	227	237	284	292	313	276	240										
55	79.0	61.3	69.1	100	106	120	93.2	75.0										
60	24.4	21.4	24.6	28.8	27.9	35.0	33.2	25.9										
65	10.6	10.1	12.1	12.4	11.2	15.5	16.9	13.0										
70	6.73	6.31	7.63	7.54	6.80	9.79	11.2	8.48										
75	4.22	3.89	4.71	4.67	4.21	6.19	7.10	5.36										
80	2.49	2.26	2.78	2.80	2.46	3.65	4.16	3.11										
85	1.14	0.97	1.17	1.38	1.16	1.72	1.81	1.29										
90	0.53	0.46	0.48	0.49	0.40	0.42	0.47	0.49										
95	0.62	0.62	0.60	0.54	0.48	0.47	0.51	0.57										
100	0.89	0.90	0.88	0.78	0.72	0.69	0.72	0.81										
105	1.27	1.29	1.26	1.13	1.07	1.01	1.06	1.16										
110	1.75	1.79	1.77	1.59	1.54	1.45	1.53	1.62										
115	2.36	2.38	2.39	2.15	2.13	2.00	2.11	2.19										
120	3.06	3.05	3.10	2.80	2.83	2.65	2.83	2.85										
125	3.80	3.72	3.86	3.47	3.59	3.34	3.59	3.55										
130	4.58	4.39	4.65	4.16	4.41	4.06	4.41	4.28										
135	5.27	5.13	5.33	4.89	5.15	4.80	5.21	5.01										
140	5.87	5.91	5.95	5.68	5.88	5.64	5.93	5.87										
145	6.45	6.56	6.54	6.37	6.53	6.39	6.58	6.63										
150	7.03	7.16	7.14	6.99	7.20	7.11	7.24	7.36										
155	7.71	7.80	7.82	7.62	7.89	7.78	7.91	8.03										
160	8.47	8.52	8.58	8.34	8.66	8.52	8.66	8.74										
165	9.26	9.27	9.35	9.10	9.45	9.26	9.43	9.50										
170	9.97	9.94	10.0	9.84	10.1	9.94	10.1	10.1										
175	10.6	10.5	10.6	10.5	10.6	10.5	10.6	10.6										
180	10.9	10.7	10.9	10.8	10.8	10.8	10.9	10.8										

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: