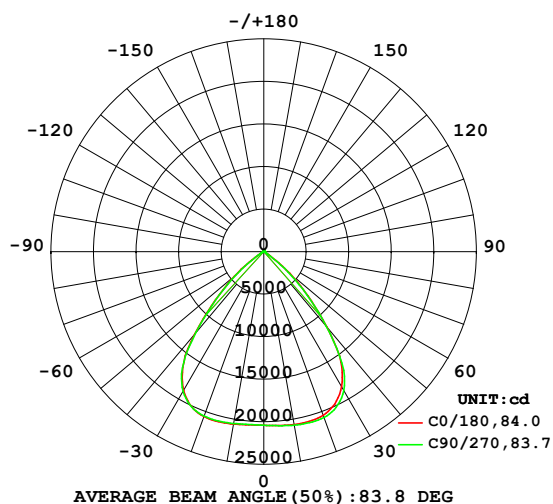


LUMINAIRE PHOTOMETRIC TEST REPORT

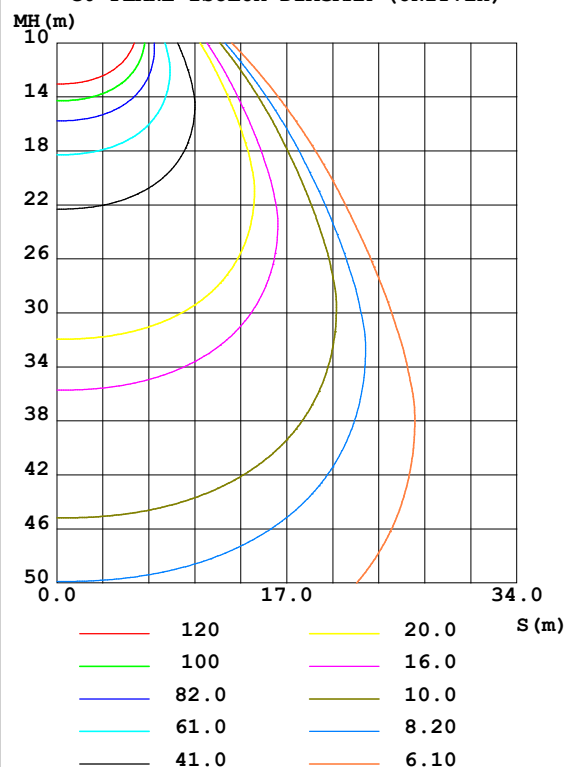
Test:U:120.6V I:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm		
NAME: H17XL-RAL-240W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 154.07 lm/W			
MODEL		Imax(cd)	20810	S/MH(C0/180)	1.23
NOMINAL POWER(W)	240	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	35094	□ UP,DN(C0-180)	0.5,48.8
NOMINAL FLUX(lm)	35093.9	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.5,50.2
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	2063	2066	2070	2066	2058	2046	2050	2058	0- 10	1958	1958	5.58,5.58
20	2045	2053	2073	2068	2062	2059	2056	2044	10- 20	5854	7812	22.3,22.3
30	1830	1838	1881	1894	1884	1909	1896	1835	20- 30	9181	16992	48.4,48.4
40	1154	1120	1146	1251	1259	1312	1241	1124	30- 40	9930	26922	76.7,76.7
50	402.5	356.2	376.0	447.5	455.5	486.9	428.8	377.0	40- 50	5953	32875	93.7,93.7
60	38.55	33.81	39.24	45.41	44.35	55.21	51.86	40.72	50- 60	1528	34403	98,98
70	10.75	10.03	12.19	12.02	10.92	15.62	17.71	13.56	60- 70	226.4	34630	98.7,98.7
80	3.990	3.597	4.468	4.482	3.958	5.827	6.583	4.969	70- 80	87.53	34717	98.9,98.9
90	0.8397	0.7293	0.7555	0.7723	0.6388	0.6701	0.7390	0.7705	80- 90	24.86	34742	99,99
100	1.400	1.412	1.368	1.226	1.145	1.084	1.145	1.272	90-100	9.856	34752	99,99
110	2.754	2.792	2.751	2.497	2.436	2.288	2.418	2.545	100-110	19.50	34772	99.1,99.1
120	4.780	4.739	4.819	4.380	4.449	4.157	4.439	4.476	110-120	34.58	34806	99.2,99.2
130	7.153	6.835	7.229	6.494	6.916	6.352	6.900	6.683	120-130	50.55	34857	99.3,99.3
140	9.158	9.164	9.239	8.822	9.188	8.818	9.249	9.159	130-140	61.39	34918	99.5,99.5
150	10.97	11.11	11.10	10.86	11.26	11.09	11.28	11.49	140-150	63.41	34982	99.7,99.7
160	13.21	13.23	13.33	12.94	13.53	13.30	13.52	13.66	150-160	56.16	35038	99.8,99.8
170	15.55	15.45	15.60	15.27	15.77	15.52	15.71	15.73	160-170	40.76	35078	100,100
180	16.90	16.67	16.93	16.77	16.90	16.70	16.90	16.77	170-180	15.41	35094	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 30523 lm

%lum = 87.0%

%lamp = 87.0%

Conical surface Flux(120deg): 34403 lm

%lum = 98.0%

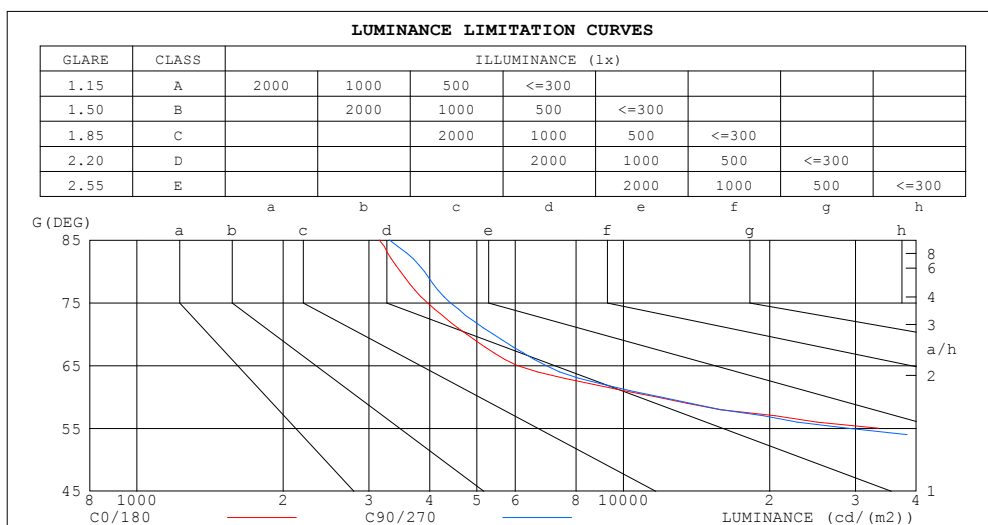
%lamp = 98.0%

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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm		
NAME: H17XL-RAL-240W-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	3149	3308
80	3482	3898
75	3957	4411
70	4762	5399
65	6053	6932
60	11681	11892
55	33455	28931
50	94884	88627
45	157476	153598

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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm					
NAME: H17XL-RAL-240W-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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm										
NAME: H17XL-RAL-240W-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	26.2	27.4	26.5	27.6	27.8	26.2	27.3	26.5	27.5	27.7
3H	26.1	27.1	26.4	27.3	27.6	26.0	27.1	26.3	27.3	27.5
4H	26.0	27.0	26.3	27.2	27.5	25.9	26.9	26.2	27.2	27.4
6H	25.9	26.8	26.2	27.1	27.3	25.8	26.7	26.2	27.0	27.3
8H	25.8	26.7	26.2	27.0	27.3	25.8	26.7	26.1	26.9	27.2
12H	25.8	26.6	26.1	26.9	27.2	25.7	26.6	26.1	26.9	27.2
4H 2H	26.0	27.0	26.3	27.2	27.5	25.9	26.9	26.2	27.2	27.4
3H	25.8	26.6	26.2	26.9	27.2	25.8	26.6	26.1	26.9	27.2
4H	25.7	26.5	26.1	26.8	27.1	25.7	26.4	26.0	26.7	27.1
6H	25.6	26.3	26.0	26.6	27.0	25.6	26.2	26.0	26.6	27.0
8H	25.6	26.2	26.0	26.6	27.0	25.5	26.1	26.0	26.5	26.9
12H	25.5	26.1	26.0	26.5	26.9	25.5	26.0	25.9	26.4	26.9
8H 4H	25.6	26.2	26.0	26.6	26.9	25.5	26.1	25.9	26.5	26.9
6H	25.5	26.0	25.9	26.4	26.8	25.4	25.9	25.9	26.4	26.8
8H	25.4	25.9	25.9	26.3	26.8	25.4	25.8	25.9	26.3	26.7
12H	25.4	25.8	25.9	26.2	26.7	25.4	25.7	25.8	26.2	26.7
12H 4H	25.5	26.1	26.0	26.5	26.9	25.5	26.0	25.9	26.4	26.8
6H	25.4	25.9	25.9	26.3	26.8	25.4	25.8	25.9	26.3	26.7
8H	25.4	25.8	25.9	26.2	26.7	25.3	25.7	25.8	26.2	26.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -10.9					+ 2.5 / -10.8				
1.5H	+ 3.2 / - 9.1					+ 3.3 / - 9.2				
2.0H	+ 6.0 / -12.1					+ 6.1 / -11.6				

CIE Pub.117, 35094 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 12.4$)

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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm		
NAME: H17XL-RAL-240W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

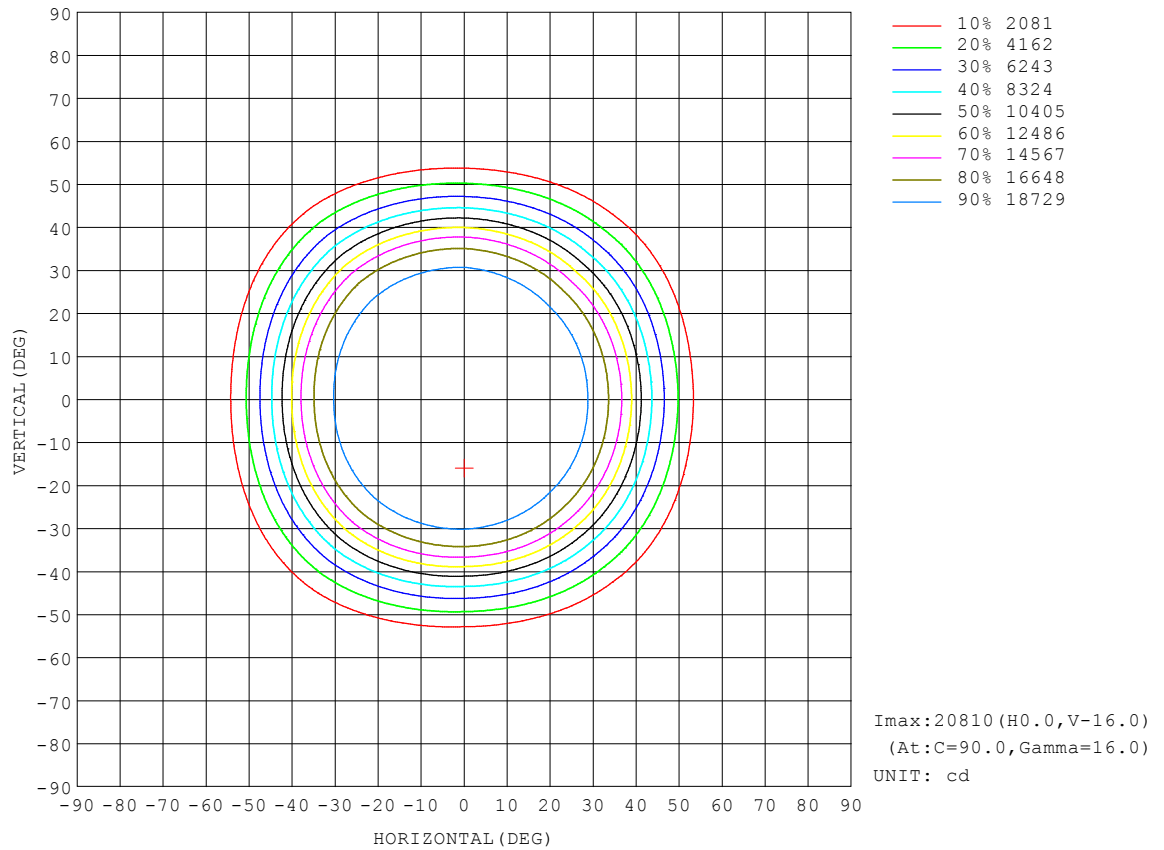
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	68	64	76	68	63	75	68	63	59
0.80	86	78	73	85	78	73	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	94	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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm		
NAME: H17XL-RAL-240W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

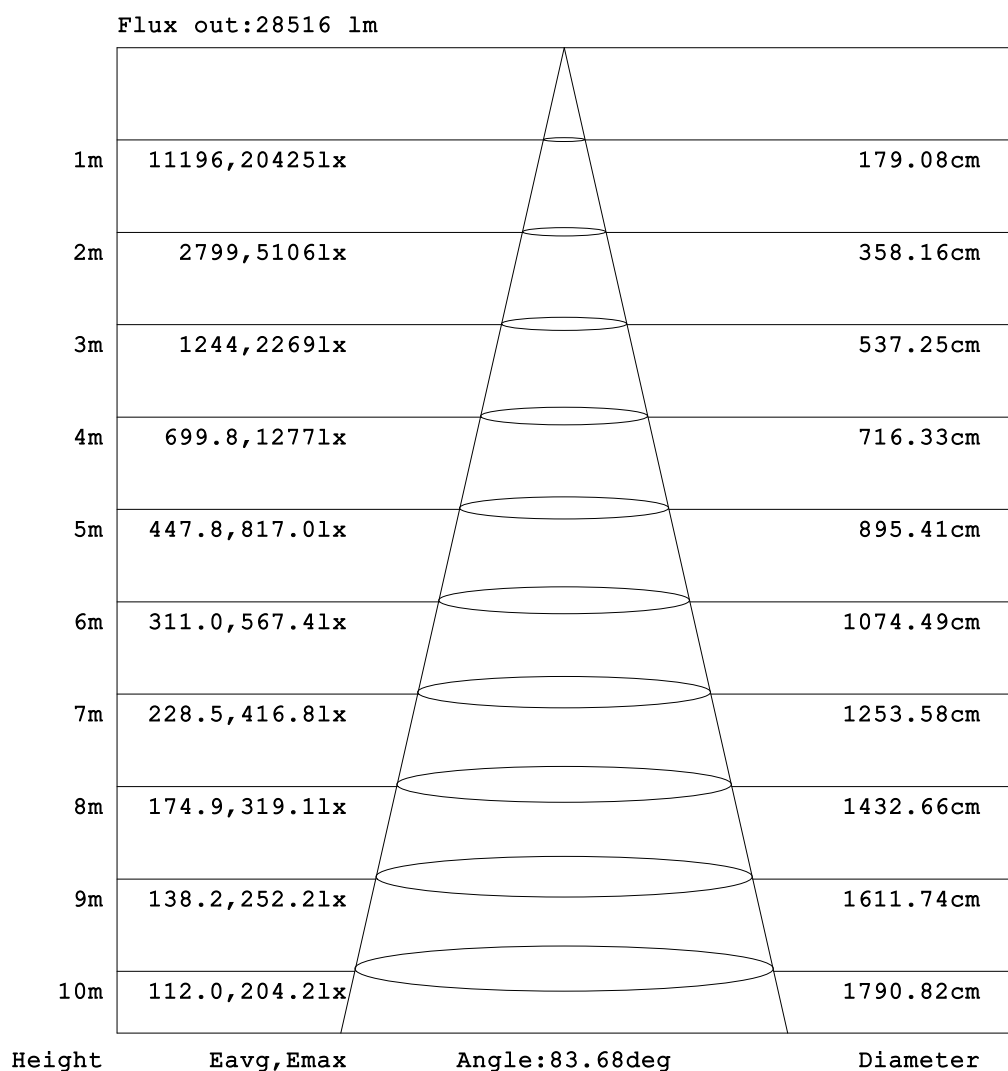


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-08-31

☐ 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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm		
NAME: H17XL-RAL-240W-4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.29*0.29m	Shielding Angle:

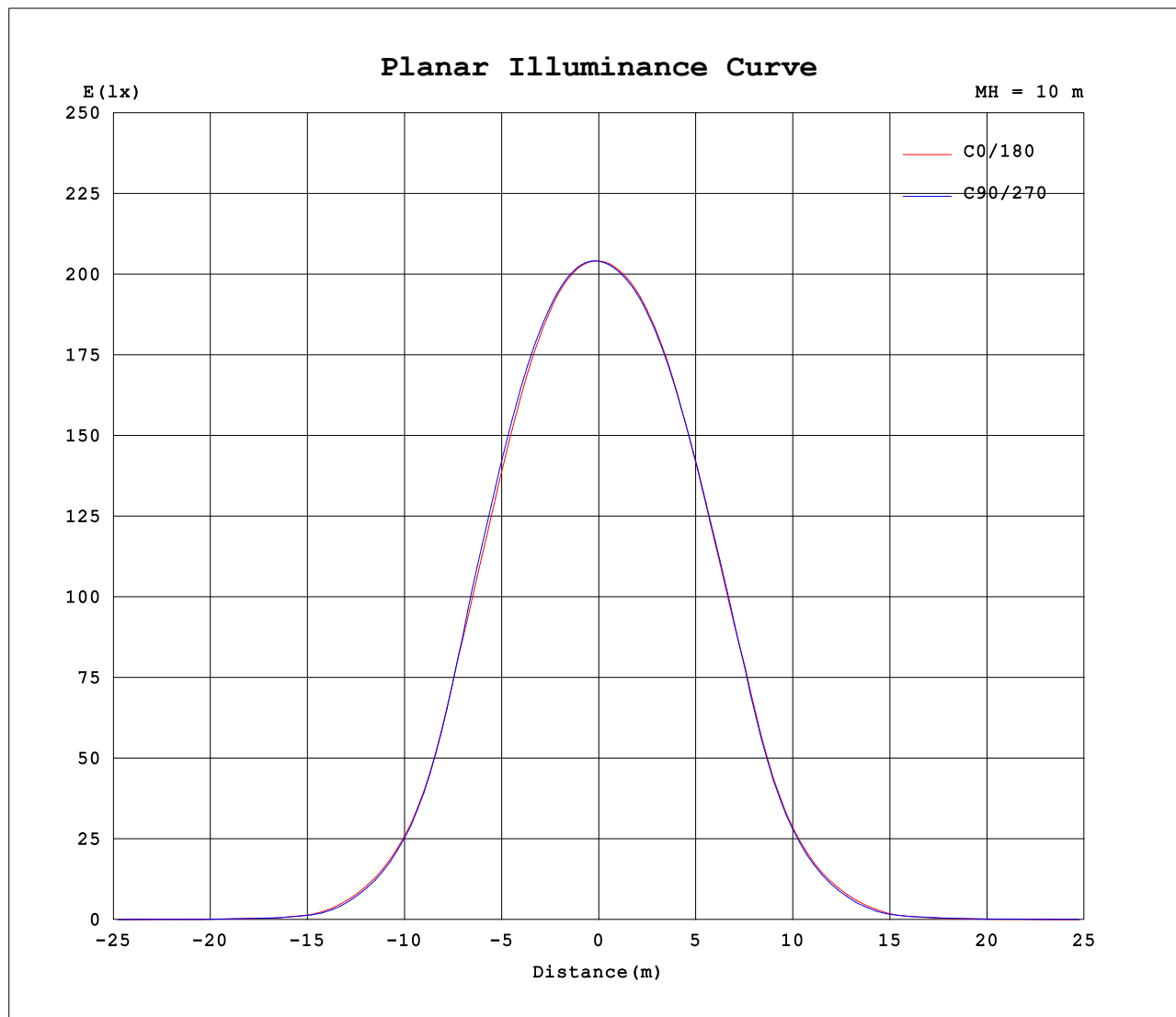


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.894A P:227.8W PF:0.9976 Freq:59.96Hz Lamp Flux:35093.9x1 lm								
NAME: H17XL-RAL-240W-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	2041	2037	2041	2042	2041	2037	2041	2042										
5	2050	2051	2053	2050	2044	2035	2039	2047										
10	2063	2066	2070	2066	2058	2046	2050	2058										
15	2066	2071	2081	2077	2070	2060	2061	2063										
20	2045	2053	2073	2068	2062	2059	2056	2044										
25	1975	1986	2018	2018	2009	2018	2011	1979										
30	1830	1838	1881	1894	1884	1909	1896	1835										
35	1584	1568	1599	1663	1659	1709	1669	1571										
40	1154	1120	1146	1251	1259	1312	1241	1124										
45	735	691	717	807	809	856	792	712										
50	403	356	376	447	455	487	429	377										
55	127	97.9	110	167	172	183	141	114										
60	38.5	33.8	39.2	45.4	44.4	55.2	51.9	40.7										
65	16.9	16.1	19.3	19.7	17.9	24.7	26.8	20.7										
70	10.7	10.0	12.2	12.0	10.9	15.6	17.7	13.6										
75	6.76	6.18	7.53	7.45	6.76	9.85	11.3	8.55										
80	3.99	3.60	4.47	4.48	3.96	5.83	6.58	4.97										
85	1.81	1.55	1.90	2.20	1.86	2.74	2.82	2.05										
90	0.84	0.73	0.76	0.77	0.64	0.67	0.74	0.77										
95	0.97	0.97	0.94	0.85	0.77	0.74	0.81	0.90										
100	1.40	1.41	1.37	1.23	1.14	1.08	1.14	1.27										
105	2.00	2.02	1.97	1.77	1.70	1.59	1.68	1.82										
110	2.75	2.79	2.75	2.50	2.44	2.29	2.42	2.55										
115	3.70	3.71	3.71	3.37	3.35	3.14	3.33	3.43										
120	4.78	4.74	4.82	4.38	4.45	4.16	4.44	4.48										
125	5.93	5.78	6.00	5.43	5.63	5.23	5.62	5.56										
130	7.15	6.83	7.23	6.49	6.92	6.35	6.90	6.68										
135	8.22	7.97	8.29	7.62	8.07	7.51	8.10	7.83										
140	9.16	9.16	9.24	8.82	9.19	8.82	9.25	9.16										
145	10.1	10.2	10.2	9.89	10.2	10.0	10.3	10.4										
150	11.0	11.1	11.1	10.9	11.3	11.1	11.3	11.5										
155	12.0	12.1	12.1	11.8	12.3	12.1	12.3	12.6										
160	13.2	13.2	13.3	12.9	13.5	13.3	13.5	13.7										
165	14.4	14.4	14.5	14.1	14.8	14.5	14.7	14.8										
170	15.6	15.5	15.6	15.3	15.8	15.5	15.7	15.7										
175	16.5	16.4	16.5	16.3	16.6	16.4	16.6	16.5										
180	16.9	16.7	16.9	16.8	16.9	16.7	16.9	16.8										

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: