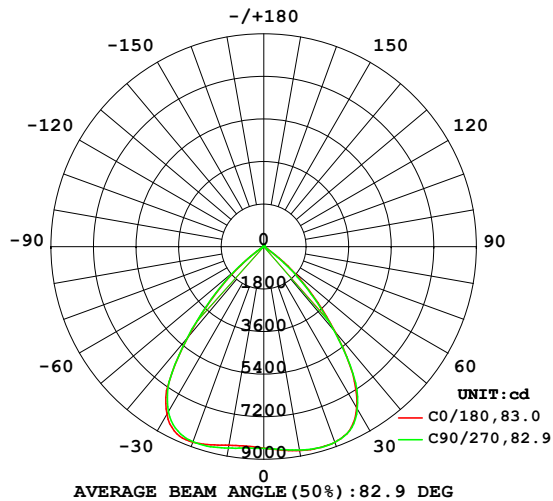


LUMINAIRE PHOTOMETRIC TEST REPORT

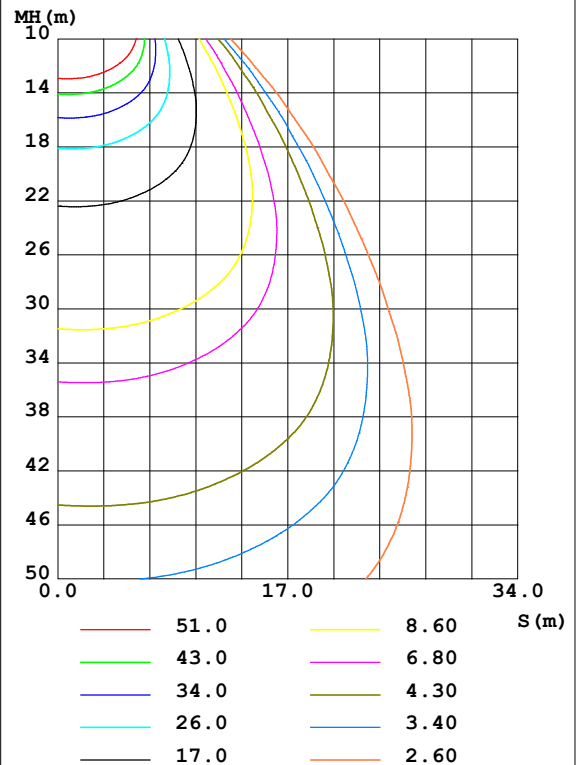
Test:U:120.6V I:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm					
NAME: H17-RAL-100W-3K		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.: RAB LIGHTING INC		SUR.:0.23		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 145.15 lm/W
MODEL		Imax(cd)	8845	S/MH(C0/180)	1.21	
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.21	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	14471	□ UP,DN(C0-180)	0.5,48.8	
NOMINAL FLUX(lm)	14471	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:2022-09-01

□ 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	8762	8775	8739	8637	8533	8540	8654	8758	0- 10	821.8	821.8	5.68,5.68
20	8803	8819	8805	8832	8805	8794	8782	8801	10- 20	2486	3308	22.9,22.9
30	7868	7804	7926	8169	8194	8227	8071	7911	20- 30	3952	7260	50.2,50.2
40	4716	4451	4618	4961	5000	5274	5029	4699	30- 40	4138	11398	78.8,78.8
50	1554	1431	1460	1521	1505	1677	1646	1480	40- 50	2342	13740	94.9,94.9
60	123.4	102.7	106.6	115.0	110.3	138.6	148.5	133.3	50- 60	499.7	14239	98.4,98.4
70	31.90	28.07	28.89	30.55	30.28	36.93	42.24	38.56	60- 70	61.26	14301	98.8,98.8
80	10.71	10.01	9.892	10.04	9.415	11.32	12.75	11.98	70- 80	21.50	14322	99,99
90	2.110	2.221	2.167	2.141	1.947	1.766	1.746	1.869	80- 90	5.734	14328	99,99
100	4.864	5.033	5.033	4.700	4.404	4.060	4.152	4.380	90-100	3.369	14331	99,99
110	10.53	10.72	10.77	9.987	9.717	8.914	9.407	9.632	100-110	7.397	14339	99.1,99.1
120	19.14	18.96	19.42	17.92	17.83	16.57	17.75	17.63	110-120	13.71	14352	99.2,99.2
130	29.25	28.20	29.56	27.11	28.18	25.89	27.98	27.10	120-130	20.56	14373	99.3,99.3
140	38.37	37.39	38.56	36.31	37.85	35.24	38.16	36.49	130-140	25.24	14398	99.5,99.5
150	45.61	46.64	46.23	45.93	46.08	45.50	46.21	46.89	140-150	26.15	14424	99.7,99.7
160	54.83	55.52	55.76	54.72	55.35	54.92	55.52	56.44	150-160	23.29	14448	99.8,99.8
170	65.21	64.94	65.69	64.34	65.41	64.59	65.63	65.79	160-170	16.99	14465	100,100
180	71.47	70.45	71.47	70.78	71.42	70.52	71.43	70.84	170-180	6.457	14471	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 12836 lm

%lum = 88.7%

%lamp = 88.7%

Conical surface Flux(120deg): 14239 lm

%lum = 98.4%

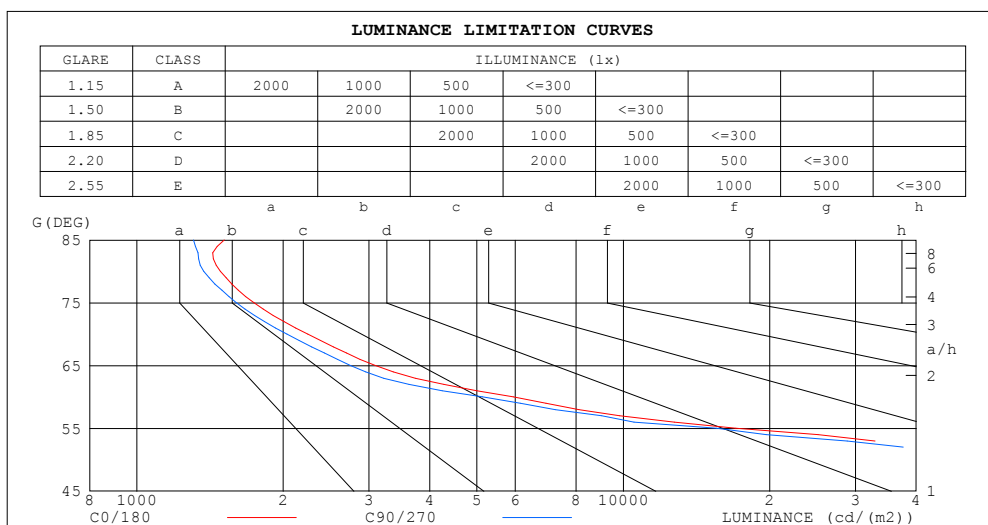
%lamp = 98.4%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-09-01

□ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm		
NAME: H17-RAL-100W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1512	1308
80	1486	1373
75	1743	1603
70	2248	2035
65	3091	2749
60	5947	5137
55	17024	15546
50	58259	54723
45	100521	96074

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-09-01

☐ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm		
NAME: H17-RAL-100W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23	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	.202 .115 .036	.194 .111 .035	.181 .104 .033	.169 .097 .031	.158 .091 .029	
2.0	.196 .108 .033	.190 .105 .032	.179 .099 .031	.168 .094 .030	.159 .090 .028	
3.0	.189 .100 .030	.183 .098 .030	.174 .094 .029	.164 .090 .028	.156 .086 .027	
4.0	.180 .094 .028	.176 .092 .027	.167 .089 .026	.159 .086 .026	.152 .082 .025	
5.0	.172 .088 .025	.168 .086 .025	.161 .084 .025	.154 .081 .024	.147 .079 .024	
6.0	.165 .082 .024	.161 .081 .023	.154 .079 .023	.148 .077 .023	.142 .075 .022	
7.0	.157 .078 .022	.154 .077 .022	.148 .075 .022	.142 .073 .021	.137 .071 .021	
8.0	.150 .073 .021	.147 .072 .020	.142 .071 .020	.136 .069 .020	.132 .068 .020	
9.0	.143 .069 .019	.141 .069 .019	.136 .067 .019	.131 .066 .019	.127 .064 .019	
10.0	.137 .066 .018	.135 .065 .018	.130 .064 .018	.126 .063 .018	.122 .061 .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	.180 .165 .151	.154 .141 .130	.106 .097 .090	.061 .056 .052	.019 .018 .017	
2.0	.167 .140 .117	.143 .121 .101	.098 .083 .071	.057 .049 .041	.018 .016 .013	
3.0	.157 .121 .093	.134 .105 .081	.092 .073 .057	.053 .043 .034	.017 .014 .011	
4.0	.148 .107 .076	.127 .093 .066	.087 .065 .047	.050 .038 .028	.016 .012 .009	
5.0	.140 .096 .064	.120 .083 .055	.083 .058 .039	.048 .034 .023	.015 .011 .008	
6.0	.133 .087 .054	.115 .075 .047	.079 .053 .033	.046 .031 .020	.015 .010 .007	
7.0	.127 .080 .047	.110 .069 .041	.076 .049 .029	.044 .029 .017	.014 .009 .006	
8.0	.122 .074 .041	.105 .064 .036	.073 .045 .025	.042 .027 .015	.014 .009 .005	
9.0	.117 .069 .037	.101 .060 .032	.070 .042 .023	.041 .025 .014	.013 .008 .004	
10.0	.112 .065 .033	.097 .056 .029	.067 .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:2022-09-01

☐ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm										
NAME: H17-RAL-100W-3K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: RAB LIGHTING INC					SUR.:0.23			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	25.9	24.4	25.4	24.7	25.6	25.9
4H	24.4	25.3	24.7	25.6	25.8	24.3	25.3	24.6	25.5	25.8
6H	24.3	25.2	24.6	25.4	25.7	24.2	25.1	24.5	25.4	25.6
8H	24.2	25.1	24.6	25.4	25.7	24.2	25.0	24.5	25.3	25.6
12H	24.2	25.0	24.5	25.3	25.6	24.1	24.9	24.5	25.2	25.5
4H 2H	24.4	25.3	24.7	25.6	25.8	24.3	25.3	24.6	25.5	25.8
3H	24.2	25.0	24.5	25.3	25.6	24.1	25.0	24.5	25.2	25.5
4H	24.1	24.9	24.5	25.2	25.5	24.0	24.8	24.4	25.1	25.4
6H	24.0	24.7	24.4	25.0	25.4	23.9	24.6	24.3	24.9	25.3
8H	24.0	24.6	24.4	24.9	25.3	23.9	24.5	24.3	24.9	25.3
12H	23.9	24.5	24.4	24.9	25.3	23.8	24.4	24.3	24.8	25.2
8H 4H	24.0	24.6	24.4	24.9	25.3	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	24.2	24.7	25.1
8H	23.8	24.3	24.3	24.7	25.2	23.7	24.2	24.2	24.6	25.1
12H	23.8	24.1	24.3	24.6	25.1	23.7	24.1	24.2	24.5	25.0
12H 4H	23.9	24.5	24.3	24.9	25.3	23.8	24.4	24.3	24.8	25.2
6H	23.8	24.3	24.3	24.7	25.2	23.7	24.2	24.2	24.6	25.1
8H	23.8	24.1	24.3	24.6	25.1	23.7	24.1	24.2	24.5	25.0
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -12.6					+ 2.5 / -13.0				
1.5H	+ 3.3 / -10.8					+ 3.5 / -11.1				
2.0H	+ 6.2 / -14.1					+ 6.2 / -14.1				

CIE Pub.117, 14471 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 9.3$)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-09-01

☐ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm		
NAME: H17-RAL-100W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23	Shielding Angle:

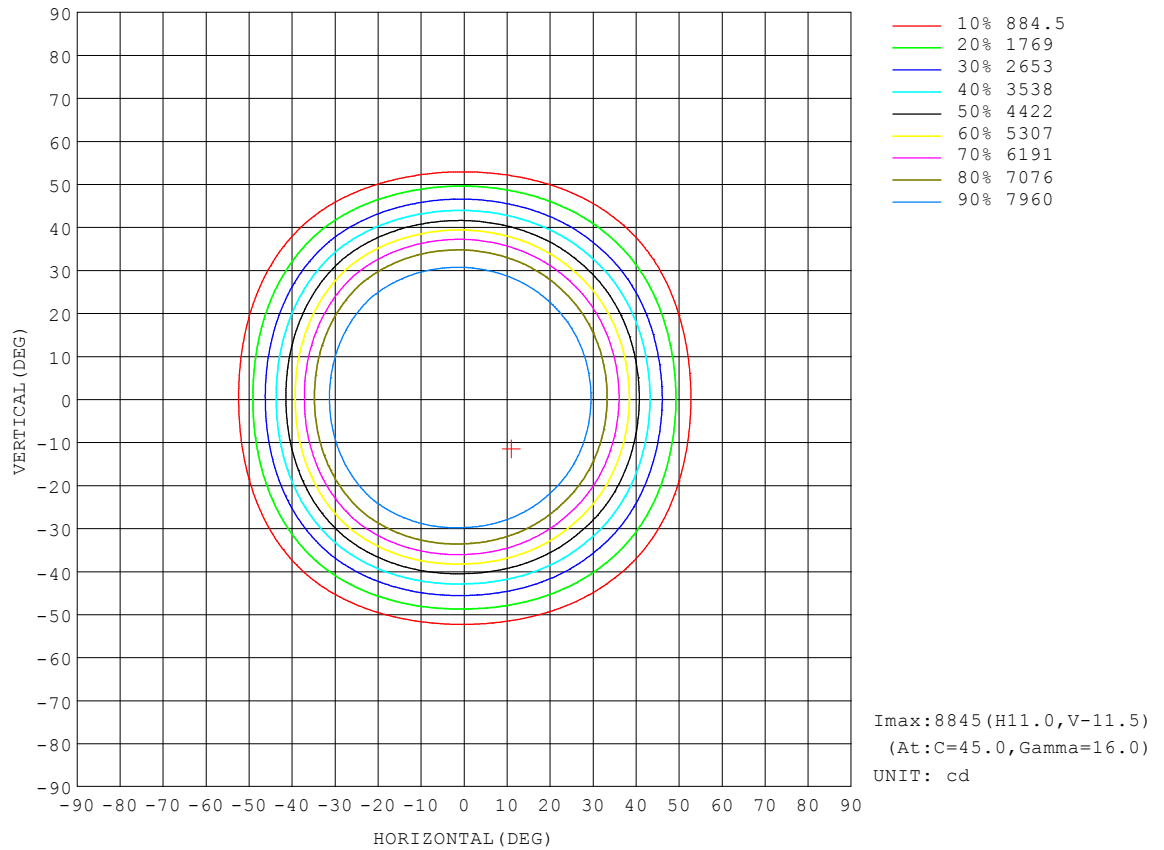
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	78	70	65	77	70	65	76	69	65	60
0.80	87	80	75	86	79	75	85	78	74	70
1.00	93	86	82	92	86	82	91	86	81	76
1.25	99	92	88	97	92	88	95	90	87	82
1.50	102	96	92	101	95	92	98	94	90	85
2.00	106	101	97	104	100	96	101	98	95	89
2.50	108	103	100	106	102	99	103	99	97	90
3.00	110	106	102	108	104	101	104	101	99	92
4.00	112	109	106	110	107	104	106	104	102	94
5.00	113	110	108	111	109	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: 2022-09-01

☐ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm		
NAME: H17-RAL-100W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23	Shielding Angle:

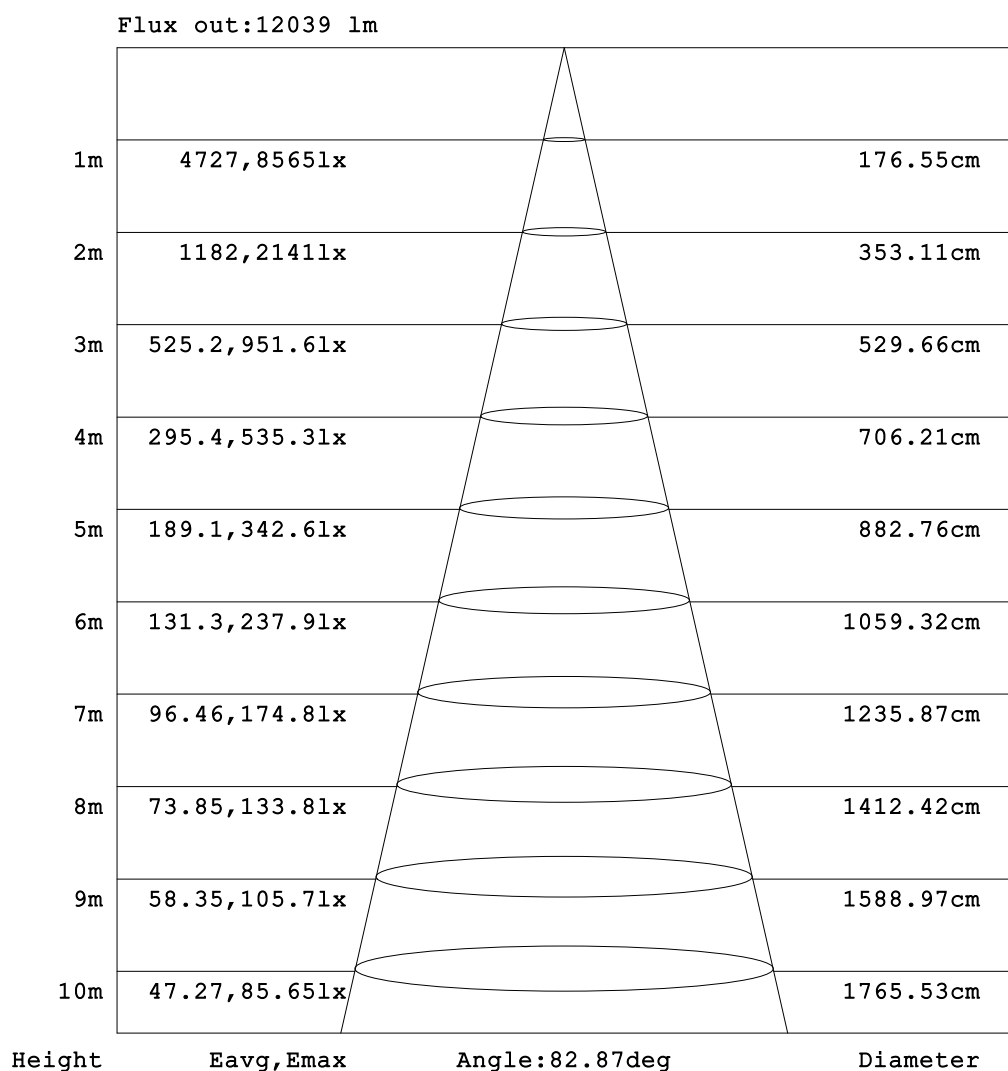


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Marvin Ma
Test Date:2022-09-01

☐ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm		
NAME: H17-RAL-100W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23	Shielding Angle:

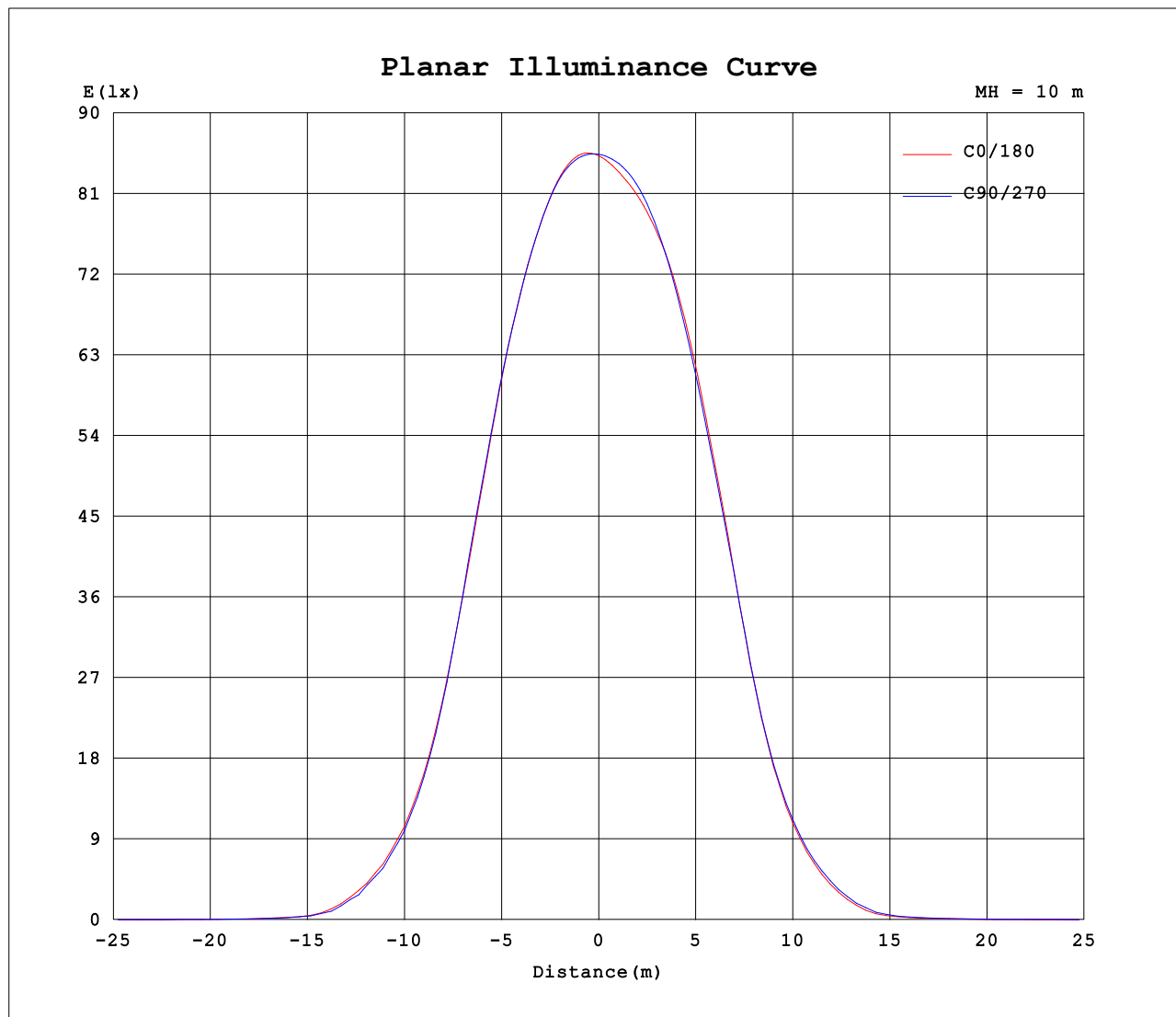


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-09-01

☐ 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: 2022-09-01

☐ 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:0.8285A P:99.70W PF:0.9976 Freq:59.99Hz Lamp Flux:14471x1 lm		
NAME: H17-RAL-100W-3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:0.23	Shielding Angle:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	8522	8532	8539	8546	8522	8532	8539	8546										
5	8641	8653	8614	8546	8474	8483	8558	8636										
10	8762	8775	8739	8637	8533	8540	8654	8758										
15	8827	8844	8825	8762	8674	8675	8758	8828										
20	8803	8819	8805	8832	8805	8794	8782	8801										
25	8584	8596	8592	8711	8728	8719	8614	8582										
30	7868	7804	7926	8169	8194	8227	8071	7911										
35	6568	6371	6589	6975	6997	7222	7002	6670										
40	4716	4451	4618	4961	5000	5274	5029	4699										
45	2950	2754	2819	3047	3065	3269	3158	2902										
50	1554	1431	1460	1521	1505	1677	1646	1480										
55	405	348	370	400	365	450	443	389										
60	123	103	107	115	110	139	149	133										
65	54.2	46.5	48.2	50.8	50.9	61.5	69.8	64.2										
70	31.9	28.1	28.9	30.5	30.3	36.9	42.2	38.6										
75	18.7	17.0	17.2	18.0	17.5	21.2	24.3	22.3										
80	10.7	10.0	9.89	10.0	9.42	11.3	12.8	12.0										
85	5.47	5.02	4.73	4.83	4.01	4.72	5.25	5.19										
90	2.11	2.22	2.17	2.14	1.95	1.77	1.75	1.87										
95	3.17	3.32	3.30	3.15	2.90	2.64	2.66	2.83										
100	4.86	5.03	5.03	4.70	4.40	4.06	4.15	4.38										
105	7.28	7.51	7.49	6.98	6.66	6.14	6.35	6.63										
110	10.5	10.7	10.8	9.99	9.72	8.91	9.41	9.63										
115	14.5	14.6	14.8	13.7	13.5	12.4	13.2	13.4										
120	19.1	19.0	19.4	17.9	17.8	16.6	17.8	17.6										
125	24.2	23.6	24.5	22.5	23.0	21.2	22.8	22.4										
130	29.3	28.2	29.6	27.1	28.2	25.9	28.0	27.1										
135	34.2	32.8	34.5	31.8	33.4	30.6	33.4	31.8										
140	38.4	37.4	38.6	36.3	37.9	35.2	38.2	36.5										
145	41.9	42.4	42.4	41.6	41.9	40.6	42.2	42.0										
150	45.6	46.6	46.2	45.9	46.1	45.5	46.2	46.9										
155	49.8	50.8	50.6	50.0	50.4	50.2	50.6	51.5										
160	54.8	55.5	55.8	54.7	55.4	54.9	55.5	56.4										
165	60.3	60.5	61.1	59.7	60.7	59.9	60.8	61.4										
170	65.2	64.9	65.7	64.3	65.4	64.6	65.6	65.8										
175	69.0	68.3	69.4	68.1	68.9	68.2	69.2	69.1										
180	71.5	70.4	71.5	70.8	71.4	70.5	71.4	70.8										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Marvin Ma
 Test Date:2022-09-01

□ 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: