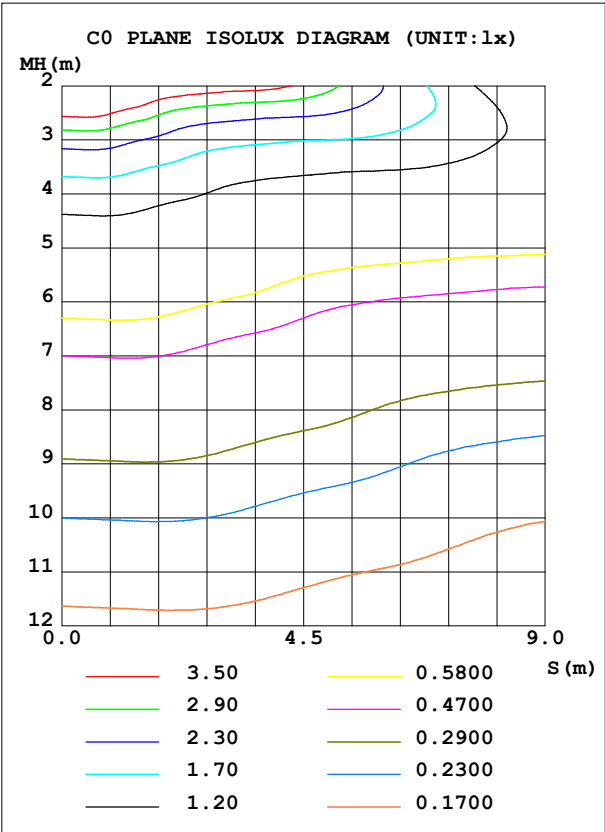
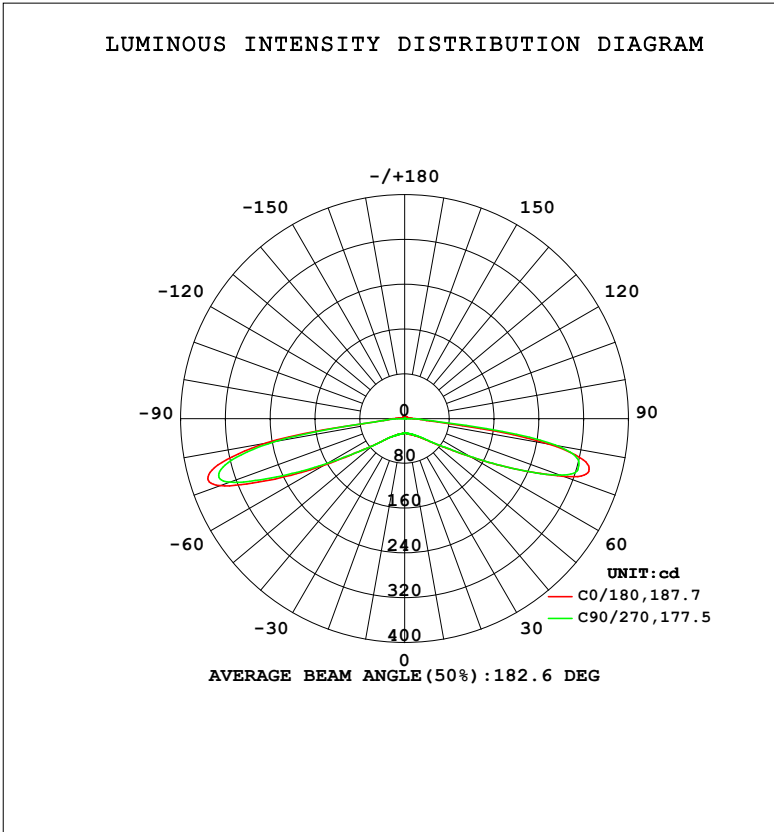


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz		
Lamp Flux:881.616x1 lm		
NAME: LS-RLB-50K-990-A	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 1*0.016	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 153.64 lm/W
MODEL	LS-RLB-50K-990-A	Imax (cd)	393.1	S/MH	5.13	
NOMINAL POWER (W)	6	LOR (%)	100.0			
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	881.62	□ UP,DN (C0-180)	1.2,47.8	
NOMINAL FLUX (lm)	881.616	CIE CLASS	DIRECT	□ UP,DN (C180-360)	1.2,49.9	
LAMPS INSIDE	1	□ up (%)	2.3	CIBSE SHR NOM	2.00	
TEST VOLTAGE (V)	24	□ down (%)	97.7	CIBSE SHR MAX	2.00	



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-04

☐ Range: 0 - 180DEG
☐Interval: 0.5DEG
Test System:GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

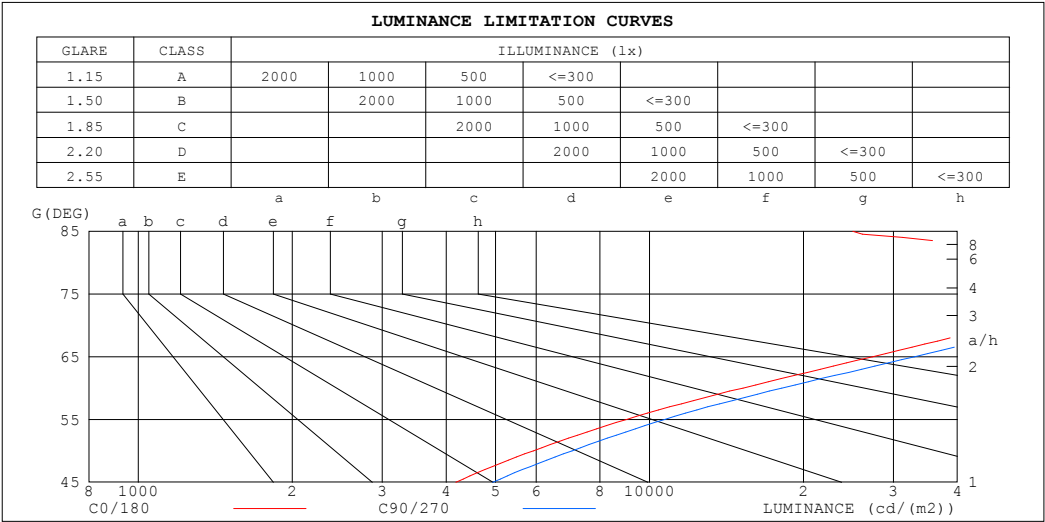
☐	C0	C45	C90	C135	C180	C225	C270	C315	☐	☐ zone	☐ total	%lum, lamp
10	27.57	27.34	27.01	26.78	27.30	27.51	27.45	27.59	0- 10	2.546	2.546	0.29,0.29
20	30.04	29.78	29.40	29.10	29.77	30.14	29.94	30.18	10- 20	8.116	10.66	1.21,1.21
30	34.92	34.23	34.09	34.12	35.24	36.17	35.21	35.62	20- 30	14.88	25.54	2.9,2.9
40	44.05	43.27	43.01	43.42	45.73	48.86	45.81	45.57	30- 40	24.80	50.34	5.71,5.71
50	68.84	67.17	67.60	70.26	76.40	86.26	76.52	74.07	40- 50	44.28	94.62	10.7,10.7
60	137.5	132.3	135.2	145.4	167.6	187.3	160.7	152.3	50- 60	94.98	189.6	21.5,21.5
70	300.9	299.6	295.7	325.3	350.6	380.9	332.4	313.8	60- 70	233.5	423.1	48,48
80	258.9	295.5	273.1	285.8	249.7	241.0	232.6	244.5	70- 80	347.1	770.2	87.4,87.4
90	18.80	22.44	7.145	21.56	19.89	23.98	3.447	17.37	80- 90	90.86	861.0	97.7,97.7
100	7.303	7.614	0.3910	7.978	8.470	8.344	0.3680	7.038	90-100	10.54	871.6	98.9,98.9
110	5.364	4.015	0.4085	4.315	5.139	4.833	0.2827	3.583	100-110	4.559	876.1	99.4,99.4
120	4.126	2.497	0.3564	1.977	3.852	2.395	0.2207	1.426	110-120	2.700	878.8	99.7,99.7
130	4.221	0.7217	0.3059	0.6635	4.011	0.7488	0.1935	0.4941	120-130	1.408	880.2	99.8,99.8
140	2.900	0.2426	0.2652	0.3459	2.269	0.3120	0.4085	0.2053	130-140	0.8388	881.1	99.9,99.9
150	0.5542	0.1441	0.2556	0.2613	0.3698	0.1849	0.3795	0.3108	140-150	0.3243	881.4	100,100
160	0.1503	0.1204	0.2575	0.2865	0.1242	0.1591	0.3543	0.3465	150-160	0.1178	881.5	100,100
170	0.1151	0.1225	0.2885	0.3098	0.0916	0.1419	0.3524	0.3446	160-170	0.0655	881.6	100,100
180	0.0892	0.1182	0.2923	0.3233	0.0939	0.1225	0.3001	0.3252	170-180	0.0214	881.6	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-04

☐ Range: 0 - 180DEG
☐Interval: 0.5DEG
Test System:GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz Lamp Flux:881.616x1 lm		
NAME: LS-RLB-50K-990-A	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 1*0.016	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	24985	39429
80	82504	105537
75	72910	83494
70	48686	58024
65	27324	32995
60	15223	18146
55	9008	10703
50	5926	7057
45	4180	4936

C Range: 0 - 360DEG	<input type="checkbox"/> Range: 0 - 180DEG
C Interval: 45.0DEG	<input type="checkbox"/> Interval: 0.5DEG
Test Speed: HIGH	Test System:EGO-2000B_V1 SYSTEM V2.00.454
Temperature:25.3DEG	Humidity:65.0%
Operators:	Test Distance:6.020m [K=1.0000]
Test Date:2024-03-04	Remarks:

WEC AND CCEC

Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz Lamp Flux:881.616x1 lm					
NAME: LS-RLB-50K-990-A			TYPE: LED		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.: 1*0.016		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	.598	.340	.108	.589	.336	.107	.573	.329	.105	.558	.322	.103	.545	.316	.102		
2.0	.506	.277	.085	.498	.274	.084	.483	.269	.083	.469	.263	.082	.457	.258	.081		
3.0	.429	.229	.068	.422	.226	.068	.409	.222	.067	.396	.217	.067	.385	.213	.066		
4.0	.369	.192	.056	.363	.190	.056	.351	.186	.056	.340	.183	.055	.330	.179	.055		
5.0	.323	.164	.048	.317	.163	.047	.306	.160	.047	.297	.156	.047	.287	.154	.046		
6.0	.286	.143	.041	.281	.142	.041	.272	.139	.040	.263	.137	.040	.255	.134	.040		
7.0	.257	.127	.036	.252	.126	.036	.244	.123	.036	.236	.121	.035	.229	.119	.035		
8.0	.233	.114	.032	.229	.113	.032	.221	.111	.032	.214	.109	.031	.208	.107	.031		
9.0	.213	.103	.029	.209	.102	.029	.203	.100	.028	.196	.098	.028	.190	.097	.028		
10.0	.196	.094	.026	.193	.093	.026	.187	.092	.026	.181	.090	.026	.176	.088	.025		

<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	.208	.208	.208	.178	.178	.178	.121	.121	.121	.070	.070	.070	.022	.022	.022															
1.0	.218	.172	.130	.187	.147	.111	.128	.101	.077	.073	.059	.045	.024	.019	.014															
2.0	.219	.149	.090	.187	.128	.078	.128	.089	.054	.074	.052	.032	.024	.017	.010															
3.0	.213	.134	.070	.183	.115	.061	.126	.080	.043	.073	.047	.025	.023	.015	.008															
4.0	.205	.122	.059	.176	.105	.051	.121	.073	.036	.070	.043	.021	.022	.014	.007															
5.0	.195	.113	.052	.167	.097	.045	.115	.068	.032	.067	.040	.019	.022	.013	.006															
6.0	.185	.105	.047	.159	.091	.041	.110	.063	.029	.064	.037	.017	.021	.012	.006															
7.0	.176	.098	.044	.151	.085	.038	.104	.060	.027	.061	.035	.016	.020	.011	.005															
8.0	.167	.092	.041	.144	.080	.036	.099	.056	.025	.058	.033	.015	.019	.011	.005															
9.0	.159	.087	.039	.137	.076	.034	.095	.053	.024	.055	.031	.014	.018	.010	.005															
10.0	.151	.083	.037	.130	.072	.033	.090	.051	.023	.053	.030	.014	.017	.010	.005															

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-04

☐ Range: 0 - 180DEG
☐Interval: 0.5DEG
Test System:O-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz Lamp Flux:881.616x1 lm										
NAME: LS-RLB-50K-990-A					TYPE: LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.: 1*0.016			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	10.3	12.4	10.7	12.7	13.0	11.0	13.1	11.4	13.4	13.8
3H	18.6	20.6	19.0	21.0	21.3	19.6	21.7	20.0	22.0	22.3
4H	22.0	23.9	22.3	24.2	24.6	22.8	24.7	23.2	25.1	25.5
6H	24.1	26.0	24.5	26.4	26.7	25.2	27.0	25.6	27.4	27.8
8H	24.6	26.4	25.0	26.8	27.2	25.8	27.6	26.2	28.0	28.4
12H	24.6	26.4	25.0	26.7	27.2	25.9	27.7	26.3	28.0	28.4
4H 2H	13.2	15.2	13.6	15.5	15.9	13.5	15.5	13.9	15.8	16.2
3H	20.6	22.4	21.0	22.7	23.2	21.3	23.0	21.7	23.4	23.8
4H	23.7	25.4	24.1	25.8	26.2	24.3	26.0	24.8	26.4	26.8
6H	25.9	27.4	26.3	27.8	28.3	26.7	28.2	27.2	28.7	29.1
8H	26.3	27.8	26.8	28.2	28.7	27.4	28.8	27.9	29.3	29.7
12H	26.4	27.7	26.9	28.2	28.7	27.5	28.8	28.0	29.3	29.8
8H 4H	24.8	26.2	25.3	26.7	27.2	25.2	26.7	25.7	27.1	27.6
6H	27.0	28.3	27.5	28.8	29.3	27.7	29.0	28.2	29.4	30.0
8H	27.6	28.7	28.1	29.2	29.7	28.4	29.6	29.0	30.1	30.6
12H	27.6	28.6	28.2	29.2	29.7	28.6	29.6	29.1	30.1	30.7
12H 4H	25.0	26.4	25.5	26.8	27.3	25.4	26.8	25.9	27.2	27.7
6H	27.3	28.4	27.8	28.9	29.4	27.9	29.1	28.4	29.5	30.1
8H	27.8	28.8	28.4	29.4	29.9	28.7	29.7	29.2	30.2	30.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.0 / - 0.1					+ 0.0 / - 0.1				
1.5H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
2.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				

CIE Pub.117, 881.6 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.4$)
Area: 0.016 m²

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-04

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System:GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

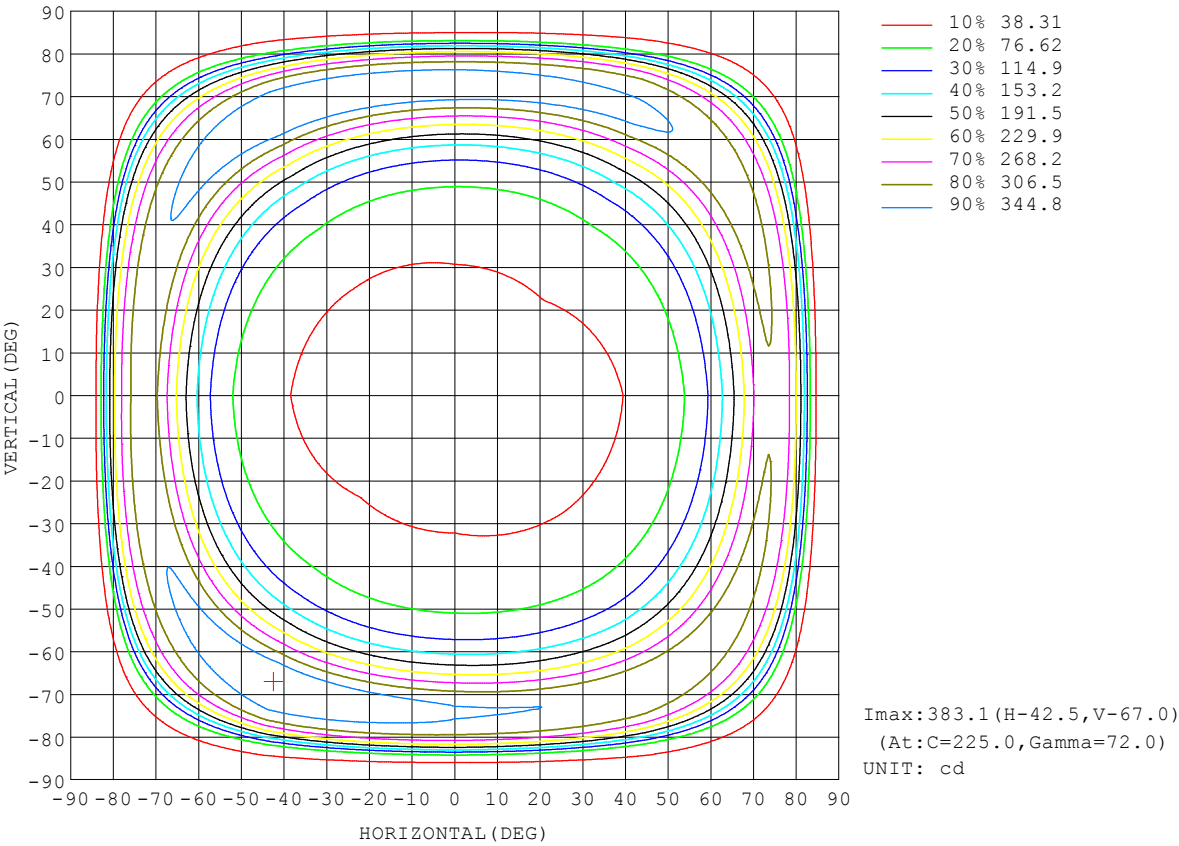
Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz Lamp Flux:881.616x1 lm		
NAME: LS-RLB-50K-990-A	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 1*0.016	Shielding Angle:

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) x RCR = 5									
k = 0.60	39	24	15	38	24	15	36	23	15	7
0.80	45	29	19	44	28	19	42	27	18	9
1.00	51	34	23	49	33	22	46	36	22	11
1.25	58	41	29	56	40	28	52	38	27	16
1.50	64	47	35	61	46	34	57	43	33	21
2.00	73	57	45	70	56	45	65	53	43	31
2.50	80	65	54	77	64	53	71	60	51	39
3.00	85	72	61	82	70	60	76	66	58	45
4.00	92	81	72	89	79	71	83	75	68	55
5.00	97	88	80	94	85	78	88	81	75	62
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:25.3DEG Operators: Test Date:2024-03-04	<input type="checkbox"/> Range: 0 - 180DEG <input type="checkbox"/> Interval: 0.5DEG Test System:O-2000B_V1 SYSTEM V2.00.454 Humidity:65.0% Test Distance:6.020m [K=1.0000] Remarks:
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ISOCANDELA DIAGRAM

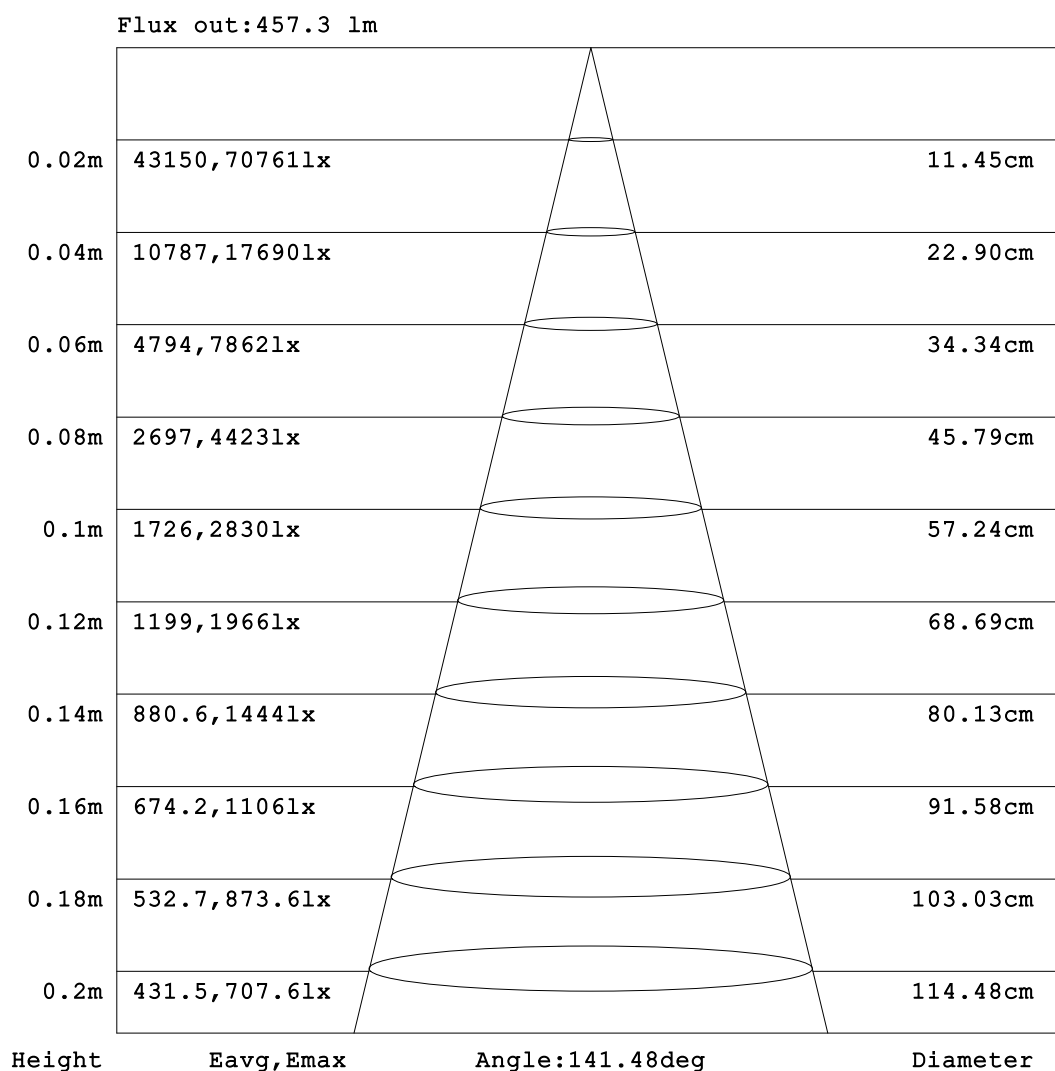
Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz		
Lamp Flux:881.616x1 lm		
NAME: LS-RLB-50K-990-A	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 1*0.016	Shielding Angle:



C Range: 0 - 360DEG	<input type="checkbox"/> Range: 0 - 180DEG
C Interval: 45.0DEG	<input type="checkbox"/> Interval: 0.5DEG
Test Speed: HIGH	Test System:GO-2000B_V1 SYSTEM V2.00.454
Temperature:25.3DEG	Humidity:65.0%
Operators:	Test Distance:6.020m [K=1.0000]
Test Date:2024-03-04	Remarks:

AAI Figure

Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz Lamp Flux:881.616x1 lm		
NAME: LS-RLB-50K-990-A	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 1*0.016	Shielding Angle:

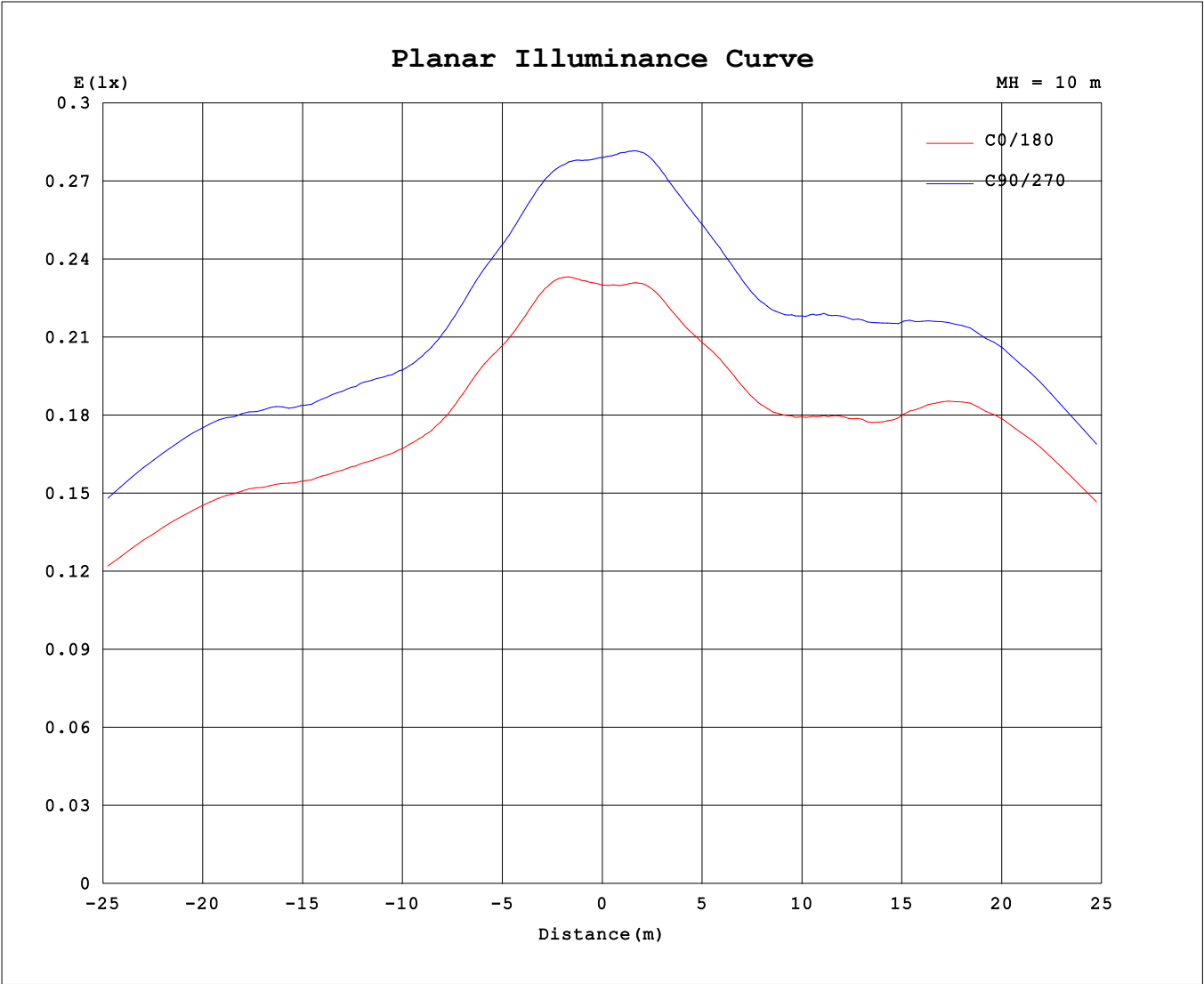


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-04

□ Range: 0 - 180DEG
□Interval: 0.5DEG
Test System:GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-03-04

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System:GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:23.999V I:0.2391A P:5.7382W PF:1.0000 Freq:0Hz		
Lamp Flux:881.616x1 lm		
NAME: LS-RLB-50K-990-A	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 1*0.016	Shielding Angle:

Table--1									UNIT: cd									
C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0										
5	26.5	26.4	26.2	26.1	26.3	26.4	26.5	26.5										
10	27.6	27.3	27.0	26.8	27.3	27.5	27.5	27.6										
15	28.8	28.6	28.1	27.8	28.5	28.7	28.6	28.8										
20	30.0	29.8	29.4	29.1	29.8	30.1	29.9	30.2										
25	31.8	31.4	31.2	31.1	31.9	32.5	32.1	32.3										
30	34.9	34.2	34.1	34.1	35.2	36.2	35.2	35.6										
35	38.7	38.1	37.8	38.0	39.3	41.0	39.3	39.6										
40	44.1	43.3	43.0	43.4	45.7	48.9	45.8	45.6										
45	53.4	51.9	52.0	53.3	57.3	63.0	57.5	56.2										
50	68.8	67.2	67.6	70.3	76.4	86.3	76.5	74.1										
55	93.4	91.2	91.5	95.9	106	122	106	103										
60	138	132	135	145	168	187	161	152										
65	209	202	208	226	256	282	242	227										
70	301	300	296	325	351	381	332	314										
75	341	354	322	350	356	375	336	322										
80	259	295	273	286	250	241	233	245										
85	39.4	49.7	51.2	45.5	34.6	38.4	35.2	38.2										
90	18.8	22.4	7.14	21.6	19.9	24.0	3.45	17.4										
95	10.86	12.5	0.38	12.5	12.3	14.3	0.38	10.0										
100	7.30	7.61	0.39	7.98	8.47	8.34	0.37	7.04										
105	5.77	4.95	0.41	5.45	6.28	5.92	0.35	4.81										
110	5.36	4.01	0.41	4.32	5.14	4.83	0.28	3.58										
115	4.70	3.40	0.40	3.18	4.64	3.65	0.25	2.51										
120	4.13	2.50	0.36	1.98	3.85	2.40	0.22	1.43										
125	3.99	1.39	0.33	1.12	3.75	1.34	0.21	0.79										
130	4.22	0.72	0.31	0.66	4.01	0.75	0.19	0.49										
135	3.67	0.40	0.28	0.47	3.72	0.47	0.16	0.33										
140	2.90	0.24	0.27	0.35	2.27	0.31	0.41	0.21										
145	1.63	0.17	0.26	0.26	1.00	0.22	0.39	0.17										
150	0.55	0.14	0.26	0.26	0.37	0.18	0.38	0.31										
155	0.33	0.12	0.26	0.27	0.13	0.17	0.38	0.34										
160	0.15	0.12	0.26	0.29	0.12	0.16	0.35	0.35										
165	0.13	0.12	0.28	0.30	0.09	0.15	0.35	0.35										
170	0.12	0.12	0.29	0.31	0.09	0.14	0.35	0.34										
175	0.11	0.12	0.29	0.32	0.09	0.13	0.32	0.33										
180	0.09	0.12	0.29	0.32	0.09	0.12	0.30	0.33										

C Range: 0 - 360DEG	□ Range: 0 - 180DEG
C Interval: 45.0DEG	□Interval: 0.5DEG
Test Speed: HIGH	Test System:GO-2000B_V1 SYSTEM V2.00.454
Temperature:25.3DEG	Humidity:65.0%
Operators:	Test Distance:6.020m [K=1.0000]
Test Date:2024-03-04	Remarks: