

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: L071707901

Luminaire Tested: **RHB-18-UNV-L840-CD-U WITH RHB-CLR**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: L071707901
Test Lab: LIGHT LABORATORY, INC. (www.lightlaboratory.com)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: RHB-18-UNV-L840-CD-U WITH RHB-CLR
Description: LED High bay
Light Source: -
Ballast/Driver: -
MEAN WELL HLG-150H-36A

Summary

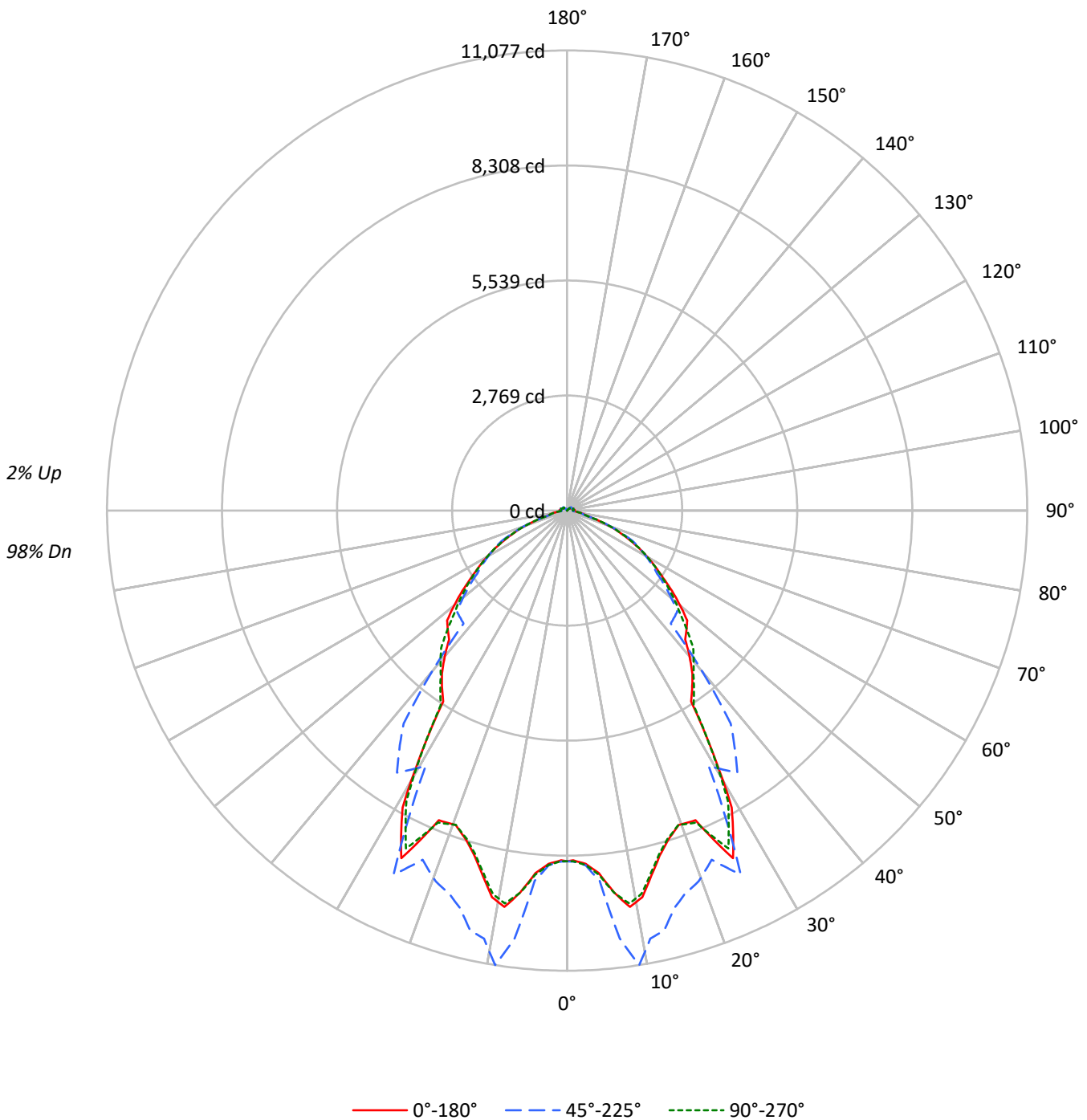
Lumens per Lamp: N/A
Luminaire Lumens: 19825.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.2
Luminous Opening: Circular (Dia: 1.29' x H: 0')
CIE Type: Direct

Input Watts (W): 153.91
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: L071707901

CATALOG NUMBER: RHB-18-UNV-L840-CD-U WITH RHB-CLR

Luminous Intensity Polar Plot





TEST NUMBER: L071707901

CATALOG NUMBER: RHB-18-UNV-L840-CD-U WITH RHB-CLR

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	120	120	120	120	116	116	116	116	111	111	111	105	105	105	100	100	100	98
1	111	107	103	99	108	104	101	97	99	96	94	95	93	90	91	89	87	85
2	102	95	89	84	99	93	87	82	89	84	80	85	81	78	82	78	76	73
3	94	85	77	72	91	83	76	71	80	74	69	76	72	68	74	70	66	64
4	87	76	68	62	85	75	67	62	72	65	60	69	64	59	67	62	58	56
5	81	69	61	55	78	68	60	54	65	59	53	63	57	53	61	56	52	50
6	75	63	55	49	73	62	54	48	60	53	48	58	52	47	56	51	46	44
7	70	57	49	44	68	57	49	43	55	48	43	53	47	42	52	46	42	40
8	66	53	45	40	64	52	45	39	51	44	39	49	43	39	48	42	38	36
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	44	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	69518	69518	69518
5°	72429	73950	72751
10°	80027	90213	79321
15°	73351	84580	72959
20°	70428	82461	70491
25°	82443	87226	80531
30°	71340	67966	70237
35°	52735	70889	53527
40°	49245	54572	50970
45°	47322	42430	47648
50°	45493	41999	43426
55°	40434	37935	39917
60°	36690	36105	36657
65°	31940	33947	32563
70°	25705	26560	26018
75°	15783	14765	15592
80°	15793	14584	15509
85°	16064	14269	15497



TEST NUMBER: L071707901

CATALOG NUMBER: RHB-18-UNV-L840-CD-U WITH RHB-CLR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	916.0	4.6
10°-20°	2646.0	13.3
20°-30°	3978.0	20.1
30°-40°	3712.2	18.7
40°-50°	3072.6	15.5
50°-60°	2467.8	12.4
60°-70°	1635.5	8.2
70°-80°	746.3	3.8
80°-90°	249.9	1.3
90°-100°	161.6	0.8
100°-110°	160.9	0.8
110°-120°	124.4	0.6
120°-130°	98.7	0.5
130°-140°	59.8	0.3
140°-150°	8.9	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	7540.1	38.0
0°-40°	11252.3	56.8
0°-60°	16792.6	84.7
0°-90°	19424.3	98.0
90°-120°	446.9	2.3
90°-150°	614.2	3.1
90°-180°	614.0	3.1
0°-180°	19825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8441	8441	8441	8441	8441	
5°	8761	8850	8945	8778	8800	874
15°	8603	9517	9920	9414	8557	2437
25°	9072	9567	9599	9286	8862	3974
35°	5245	6116	7051	6062	5324	3661
45°	4063	3883	3643	3951	4091	3185
55°	2816	2696	2642	2708	2780	2592
65°	1639	1675	1742	1708	1671	1635
75°	496	492	464	475	490	741
85°	170	164	151	160	164	200
90°	141	138	134	137	137	87
95°	183	153	142	150	166	128
105°	162	160	163	156	150	166
115°	117	122	124	124	119	123
125°	100	108	115	108	101	91
135°	71	78	84	78	72	54
145°	7	8	8	8	7	8
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: L071707901

CATALOG NUMBER: RHB-18-UNV-L840-CD-U WITH RHB-CLR

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8441	8441	8441	8441	8441	8441	8441	8441	8441	8441	8441
1°	8421	8444	8482	8473	8469	8482	8470	8463	8476	8452	8477
3°	8513	8534	8575	8568	8561	8577	8566	8558	8575	8551	8575
5°	8761	8789	8834	8830	8836	8865	8886	8923	8959	8945	8956
7°	9259	9279	9364	9508	9678	9870	10072	10239	10361	10372	10348
9°	9659	9771	10010	10251	10530	10812	10960	11025	11059	11077	11092
11°	9480	9669	9993	10339	10629	10718	10666	10601	10534	10498	10478
13°	9017	9200	9502	9826	10087	10205	10265	10317	10340	10373	10361
15°	8603	8740	8989	9259	9453	9581	9748	9933	9931	9920	9971
17°	8295	8374	8585	8792	9000	9137	9279	9494	9621	9661	9631
19.5°	8029	8066	8183	8359	8580	8750	8831	8992	9293	9471	9274
22.5°	8070	8086	8140	8248	8424	8626	8860	9039	9089	9098	9079
25.5°	9273	9304	9369	9490	9713	9838	9809	9769	9707	9699	9670
29°	8176	8043	7701	7374	7135	6993	6933	6970	6988	7022	7015
33°	5479	5499	5699	6202	6740	7080	7226	7405	7479	7522	7461
37.5°	4953	4968	5025	5070	5111	5138	5234	5554	6132	6462	6155
42.5°	4208	4250	4292	4318	4307	4187	3953	3697	3658	3690	3688
47.5°	3918	3747	3525	3509	3520	3517	3551	3581	3592	3596	3609
55°	2816	2829	2795	2741	2708	2683	2674	2671	2644	2642	2644
65°	1639	1647	1656	1673	1669	1681	1705	1719	1728	1742	1754
75°	496	502	504	501	497	487	479	472	467	464	465
85°	170	168	168	168	166	161	158	155	152	151	152
90°	141	139	138	139	140	137	137	137	135	134	135
95°	183	180	172	165	157	149	145	142	140	142	140
100°	152	150	152	149	149	148	149	147	145	143	143
105°	162	158	158	156	160	159	165	162	162	163	162
110°	153	153	153	152	149	145	140	137	134	133	134
115°	117	118	119	120	121	122	123	123	123	124	123
120°	106	106	108	111	113	115	116	118	119	120	120
125°	100	101	103	105	107	109	111	112	113	115	114
130°	101	102	104	107	110	112	115	118	120	120	120
135°	71	71	73	75	77	78	81	83	84	84	84
140°	35	36	36	37	39	39	40	41	42	42	42
145°	7	7	7	7	8	8	8	8	8	8	8
150°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: L071707901

CATALOG NUMBER: RHB-18-UNV-L840-CD-U WITH RHB-CLR

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	8441	8441	8441	8441	8441	8441	8441	8441
1°	8462	8413	8395	8408	8386	8381	8412	8442
3°	8561	8517	8495	8510	8486	8478	8514	8540
5°	8921	8838	8779	8776	8750	8732	8770	8800
7°	10197	9950	9692	9466	9311	9207	9225	9268
9°	11013	10852	10612	10328	10013	9718	9598	9575
11°	10515	10591	10589	10443	10112	9737	9504	9395
13°	10254	10099	10023	9949	9671	9309	9056	8954
15°	9872	9634	9470	9357	9132	8824	8625	8557
17°	9446	9201	9017	8887	8679	8429	8292	8265
19.5°	8965	8771	8634	8493	8291	8097	8019	8026
22.5°	9044	8860	8582	8405	8276	8158	8123	8128
25.5°	9675	9607	9510	9380	9202	9101	9043	9009
29°	7034	7019	7036	7183	7401	7674	7903	7985
33°	7342	7201	6996	6696	6314	5937	5692	5588
37.5°	5692	5296	5112	5053	5022	5003	4983	4994
42.5°	3727	3953	4306	4480	4473	4464	4472	4488
47.5°	3584	3549	3513	3506	3517	3625	3724	3694
55°	2652	2659	2699	2716	2740	2753	2786	2780
65°	1731	1733	1712	1704	1686	1693	1674	1671
75°	469	470	471	479	482	484	486	490
85°	153	155	158	161	164	164	164	164
90°	135	136	137	137	137	137	137	137
95°	139	142	146	154	160	164	167	166
100°	145	145	146	147	146	144	145	144
105°	164	165	157	155	152	152	152	150
110°	136	139	142	144	148	148	155	151
115°	124	124	124	123	121	120	118	119
120°	118	117	115	113	111	108	106	106
125°	113	111	109	107	105	103	101	101
130°	117	115	113	110	107	104	103	103
135°	82	81	79	77	75	73	72	72
140°	41	40	40	39	37	36	36	36
145°	8	8	8	8	7	7	7	7
150°	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0

(END OF REPORT)