

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 112P108

Luminaire Tested: **DI-248VHO**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 112P108
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DI-248VHO
Description: Heavy-duty Industrial with tombstone sockets and
uplight apertures.
Light Source: Two-F48T12/CW/1500, 6500 Lumens ea., 110 Watts ea.
Ballast/Driver: -

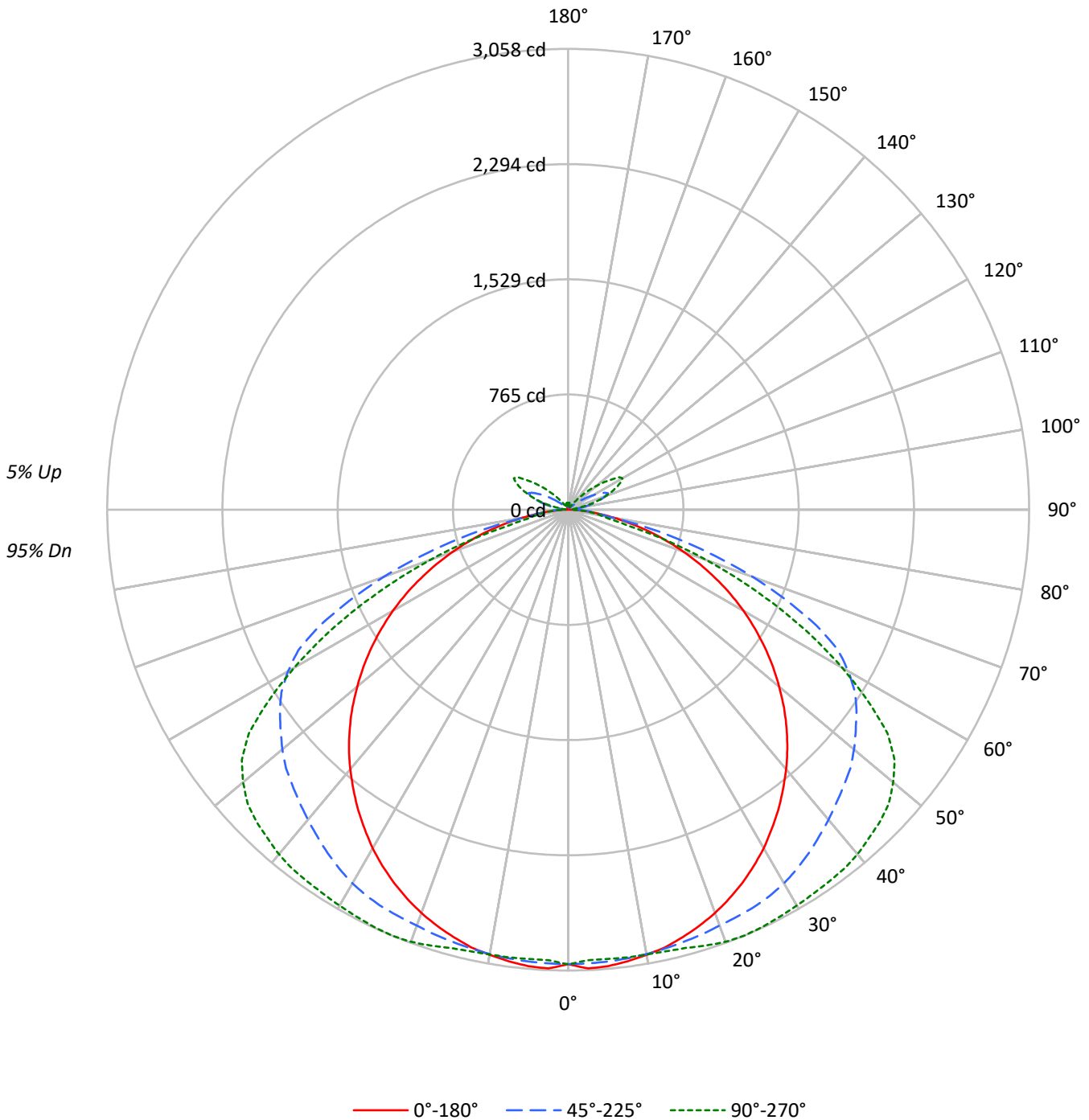
Summary

Lumens per Lamp: 6500 (2 lamps)
Luminaire Lumens: 11220.4 lumens
Efficiency: 86.3%
Efficacy: 49.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.53 / 1.58
Luminous Opening: Rectangular (W 1.09' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 225.8
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

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Luminous Intensity Polar Plot





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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	50	30	10	50	30	10	0		
RCR																										
0	102	102	102	102	99	99	99	99	93	93	93	88	88	88	84	84	84	84	84	84	84	84	84	82		
1	92	88	84	81	90	86	82	79	81	78	76	77	75	73	73	71	70	70	70	70	70	70	70	68		
2	84	76	70	65	81	74	69	64	70	66	62	67	63	60	64	60	58	58	58	58	58	58	58	55		
3	76	66	59	53	73	65	58	53	61	56	51	58	54	50	56	52	48	48	48	48	48	48	48	46		
4	69	58	51	45	67	57	50	44	54	48	43	52	46	42	49	45	41	41	41	41	41	41	41	39		
5	63	52	44	38	61	50	43	37	48	42	37	46	40	36	44	39	35	35	35	35	35	35	35	33		
6	58	46	38	33	56	45	38	32	43	37	32	41	35	31	39	34	30	30	30	30	30	30	30	28		
7	54	42	34	28	52	41	33	28	39	32	28	37	32	27	36	31	27	27	27	27	27	27	27	25		
8	50	38	30	25	48	37	30	25	35	29	24	34	28	24	33	27	24	24	24	24	24	24	24	22		
9	46	35	27	22	45	34	27	22	33	26	22	31	26	22	30	25	21	21	21	21	21	21	21	19		
10	43	32	25	20	42	31	24	20	30	24	20	29	23	19	28	23	19	19	19	19	19	19	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7420	7420	7420
5°	7508	7434	7392
10°	7492	7482	7487
15°	7478	7559	7669
20°	7456	7689	7988
25°	7419	7902	8287
30°	7369	8133	8616
35°	7301	8355	9049
40°	7223	8626	9587
45°	7129	9001	10180
50°	6993	9473	10774
55°	6824	10015	11092
60°	6608	10559	10338
65°	6293	10577	8982
70°	5848	9351	7028
75°	5238	7215	4011
80°	4350	3868	3117
85°	3303	4065	3303



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	287.0	2.6	2.2	0°	3016	3016	3016	3016	3016	
10°-20°	841.4	7.5	6.5	5°	3040	3018	3010	3004	2993	289
20°-30°	1338.6	11.9	10.3	15°	2936	2938	2968	3003	3011	829
30°-40°	1723.3	15.4	13.3	25°	2733	2773	2911	3025	3053	1259
40°-50°	1966.4	17.5	15.1	35°	2431	2538	2782	2949	3013	1520
50°-60°	1974.5	17.6	15.2	45°	2049	2275	2587	2837	2926	1579
60°-70°	1541.5	13.7	11.9	55°	1591	1914	2335	2564	2586	1421
70°-80°	749.5	6.7	5.8	65°	1081	1527	1817	1628	1543	1068
80°-90°	186.0	1.7	1.4	75°	551	1020	759	509	422	584
90°-100°	51.5	0.5	0.4	85°	117	232	144	123	117	136
100°-110°	145.3	1.3	1.1	90°	15	109	46	24	18	12
110°-120°	200.2	1.8	1.5	95°	2	77	35	23	19	2
120°-130°	134.9	1.2	1.0	105°	3	115	186	176	167	3
130°-140°	46.4	0.4	0.4	115°	6	30	266	352	355	5
140°-150°	12.4	0.1	0.1	125°	7	12	120	286	349	6
150°-160°	8.1	0.1	0.1	135°	9	11	34	107	151	7
160°-170°	10.0	0.1	0.1	145°	10	11	17	20	38	6
170°-180°	3.5	0.0	0.0	155°	13	15	15	21	21	7
0°-30°	2467.0	22.0	19.0	165°	32	37	39	42	42	8
0°-40°	4190.2	37.3	32.2	175°	27	30	35	39	40	3
0°-60°	8131.1	72.5	62.5	180°	25	25	25	25	25	
0°-90°	10608.1	94.5	81.6							
90°-120°	397.0	3.5	3.1							
90°-150°	590.7	5.3	4.5							
90°-180°	612.0	5.5	4.7							
0°-180°	11220.4	100.0	86.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3016	3016	3016	3016	3016
2.5°	3047	3026	3013	3004	2992
5°	3040	3018	3010	3004	2993
7.5°	3023	3005	3003	3003	2996
10°	2999	2989	2995	3002	2997
12.5°	2974	2967	2982	3001	3001
15°	2936	2938	2968	3003	3011
17.5°	2895	2904	2954	3012	3033
20°	2848	2865	2937	3026	3051
22.5°	2793	2821	2924	3032	3058
25°	2733	2773	2911	3025	3053
27.5°	2666	2716	2891	3008	3044
30°	2594	2658	2863	2989	3033
32.5°	2513	2604	2825	2969	3023
35°	2431	2538	2782	2949	3013
37.5°	2340	2476	2734	2930	3005
40°	2249	2413	2686	2912	2985
42.5°	2152	2346	2636	2877	2954
45°	2049	2275	2587	2837	2926
47.5°	1941	2193	2539	2797	2885
50°	1827	2103	2475	2747	2815
52.5°	1712	2008	2404	2663	2729
55°	1591	1914	2335	2564	2586
57.5°	1468	1818	2256	2402	2354
60°	1343	1726	2146	2161	2101
62.5°	1213	1632	2018	1905	1830
65°	1081	1527	1817	1628	1543
67.5°	947	1411	1562	1342	1250
70°	813	1303	1300	1059	977
72.5°	680	1178	1026	807	699
75°	551	1020	759	509	422
77.5°	425	803	511	289	276
80°	307	593	273	225	220
82.5°	203	393	198	173	169
85°	117	232	144	123	117
87.5°	54	168	94	70	65
90°	15	109	46	24	18
92.5°	4	87	41	23	18
95°	2	77	35	23	19
97.5°	2	92	60	28	22
100°	2	113	101	74	59
102.5°	2	129	145	127	116
105°	3	115	186	176	167
107.5°	3	91	227	225	219
110°	4	68	263	269	266



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4	46	286	313	313
115°	6	30	266	352	355
117.5°	6	20	229	381	392
120°	6	18	192	379	416
122.5°	7	13	156	334	401
125°	7	12	120	286	349
127.5°	7	13	87	239	299
130°	9	13	58	192	248
132.5°	10	12	37	148	199
135°	9	11	34	107	151
137.5°	10	10	20	70	108
140°	9	10	17	43	69
142.5°	10	10	17	38	43
145°	10	11	17	20	38
147.5°	10	12	17	19	19
150°	11	12	16	18	18
152.5°	12	13	14	20	19
155°	13	15	15	21	21
157.5°	17	18	18	20	22
160°	22	23	24	24	24
162.5°	28	31	33	33	35
165°	32	37	39	42	42
167.5°	33	39	43	45	45
170°	32	38	44	46	45
172.5°	29	34	41	44	46
175°	27	30	35	39	40
177.5°	25	27	28	29	28
180°	25	25	25	25	25

(END OF REPORT)