

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: 112P105

Luminaire Tested: **DCI-248HO**

Issue Date: 3/3/2020



**Test Information**

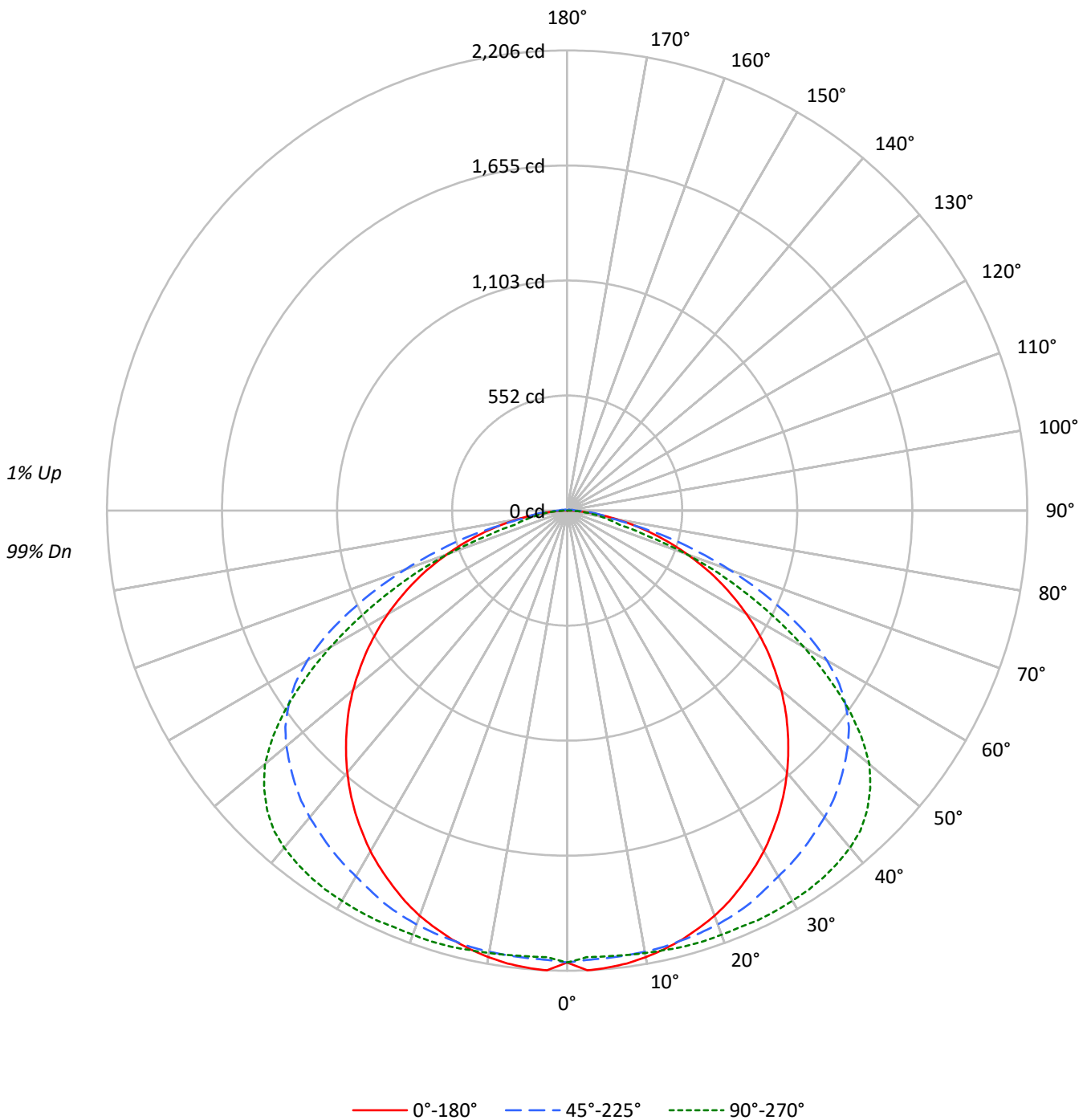
Test Method: LM-41-14  
Report Number: 112P105  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: DCI-248HO  
Description: Heavy-duty Industrial with tombstone sockets.  
Light Source: Two-F48T12/CW/HO, 4300 Lumens ea., 60 Watts ea.  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 4300 (2 lamps)  
Luminaire Lumens: 7457.5 lumens  
Efficiency: 86.7%  
Efficacy: 51.6 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.51 / 1.57  
Luminous Opening: Rectangular (W 1.09' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 144.5  
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: 112P105  
CATALOG NUMBER: DCI-248HO

### 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	0
RCR																		
0	103	103	103	103	101	101	101	101	96	96	96	92	92	92	88	88	88	86
1	94	90	86	82	91	88	84	81	84	81	78	80	78	76	77	75	74	72
2	85	78	72	66	83	76	70	66	73	68	64	70	66	62	67	64	61	59
3	77	68	60	55	75	66	59	54	64	58	53	61	56	52	59	55	51	49
4	70	60	52	46	68	58	51	45	56	50	45	54	48	44	52	47	43	41
5	64	53	45	39	63	52	44	39	50	43	38	48	42	38	46	41	37	35
6	59	47	39	34	58	47	39	33	45	38	33	43	37	33	42	37	32	31
7	55	43	35	29	53	42	35	29	41	34	29	39	33	29	38	33	28	27
8	51	39	31	26	49	38	31	26	37	30	26	36	30	26	35	29	25	24
9	47	35	28	23	46	35	28	23	34	27	23	33	27	23	32	27	23	21
10	44	33	26	21	43	32	25	21	31	25	21	30	25	21	30	24	20	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5329	5329	5329
5°	5433	5320	5297
10°	5431	5366	5381
15°	5423	5430	5512
20°	5412	5527	5666
25°	5383	5635	5880
30°	5358	5753	6136
35°	5316	5941	6442
40°	5267	6166	6776
45°	5205	6426	7073
50°	5129	6725	7241
55°	5027	6996	7034
60°	4891	7080	6461
65°	4692	6718	5589
70°	4409	5956	4366
75°	4021	4800	2471
80°	3443	3074	2324
85°	2625	3500	2145



TEST NUMBER: 112P105  
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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	206.2	2.8	2.4	0°	2166	2166	2166	2166	2166	
10°-20°	605.0	8.1	7.0	5°	2200	2169	2154	2153	2145	209
20°-30°	957.7	12.8	11.1	15°	2129	2115	2132	2160	2164	601
30°-40°	1233.8	16.5	14.3	25°	1983	2002	2076	2142	2166	914
40°-50°	1393.1	18.7	16.2	35°	1770	1837	1978	2106	2145	1107
50°-60°	1352.3	18.1	15.7	45°	1496	1617	1847	1999	2033	1154
60°-70°	1025.7	13.8	11.9	55°	1172	1379	1631	1668	1640	1046
70°-80°	502.1	6.7	5.8	65°	806	1106	1154	1016	960	796
80°-90°	138.9	1.9	1.6	75°	423	678	505	304	260	448
90°-100°	24.7	0.3	0.3	85°	93	181	124	85	76	108
100°-110°	9.4	0.1	0.1	90°	12	85	40	7	0	9
110°-120°	4.7	0.1	0.1	95°	0	52	30	5	0	0
120°-130°	2.5	0.0	0.0	105°	0	18	13	4	0	0
130°-140°	1.2	0.0	0.0	115°	0	7	9	3	0	0
140°-150°	0.1	0.0	0.0	125°	0	2	6	3	0	0
150°-160°	0.0	0.0	0.0	135°	0	1	3	2	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1768.9	23.7	20.6	165°	0	0	0	0	0	0
0°-40°	3002.6	40.3	34.9	175°	0	0	0	0	0	0
0°-60°	5748.1	77.1	66.8	180°	0	0	0	0	0	0
0°-90°	7414.8	99.4	86.2							
90°-120°	38.8	0.5	0.5							
90°-150°	42.7	0.6	0.5							
90°-180°	43.0	0.6	0.5							
0°-180°	7457.5	100.0	86.7							



TEST NUMBER: 112P105  
 CATALOG NUMBER: DCI-248HO

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2166	2166	2166	2166	2166
2.5°	2206	2174	2156	2152	2143
5°	2200	2169	2154	2153	2145
7.5°	2190	2161	2151	2155	2149
10°	2174	2148	2148	2157	2154
12.5°	2153	2134	2142	2159	2158
15°	2129	2115	2132	2160	2164
17.5°	2099	2092	2123	2160	2166
20°	2067	2066	2111	2156	2164
22.5°	2028	2036	2096	2146	2162
25°	1983	2002	2076	2142	2166
27.5°	1936	1965	2050	2138	2164
30°	1886	1925	2025	2127	2160
32.5°	1829	1882	2003	2119	2155
35°	1770	1837	1978	2106	2145
37.5°	1707	1788	1948	2087	2130
40°	1640	1735	1920	2065	2110
42.5°	1569	1677	1887	2038	2081
45°	1496	1617	1847	1999	2033
47.5°	1420	1558	1803	1943	1971
50°	1340	1502	1757	1877	1892
52.5°	1255	1440	1703	1788	1777
55°	1172	1379	1631	1668	1640
57.5°	1083	1317	1547	1522	1480
60°	994	1251	1439	1361	1313
62.5°	899	1179	1307	1190	1137
65°	806	1106	1154	1016	960
67.5°	710	1031	994	838	787
70°	613	935	828	671	607
72.5°	517	815	662	481	408
75°	423	678	505	304	260
77.5°	331	540	329	216	209
80°	243	404	217	172	164
82.5°	163	276	170	128	120
85°	93	181	124	85	76
87.5°	40	128	78	42	32
90°	12	85	40	7	0
92.5°	1	71	35	6	0
95°	0	52	30	5	0
97.5°	0	37	25	5	0
100°	0	28	19	5	0
102.5°	0	22	15	4	0
105°	0	18	13	4	0
107.5°	0	14	11	3	0
110°	0	11	10	3	0



TEST NUMBER: 112P105  
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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	9	10	3	0
115°	0	7	9	3	0
117.5°	0	5	8	3	0
120°	0	4	7	3	0
122.5°	1	3	6	3	0
125°	0	2	6	3	0
127.5°	0	2	5	3	0
130°	0	2	4	3	0
132.5°	0	1	3	3	0
135°	0	1	3	2	0
137.5°	0	1	2	2	0
140°	0	0	2	3	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)