Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: 112P103

Luminaire Tested: **DI-248HO**

Issue Date: 3/3/2020

Report Generated By E9911574 / USPTCWHP6081592

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Test Information

Test Method:	LM-41-14
Report Number:	112P103
Test Lab:	
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	DI-248HO
Description:	Heavy-duty Industrial with Tombstone sockets and uplight apertures.
Light Source:	Two-F48T12/CW/HO, 4300 Lumens ea., 60 watts ea.
Ballast/Driver:	-

Summary

Lumens per Lamp:	4300 (2 lamps)
Luminaire Lumens:	7220.9 lumens
Efficiency:	84.0%
Efficacy:	49.4 lumens/watt
Spacing Criteria (0/90/45):	1.28 / 1.53 / 1.58
Luminous Opening:	Rectangular (W 1.09' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	146.2
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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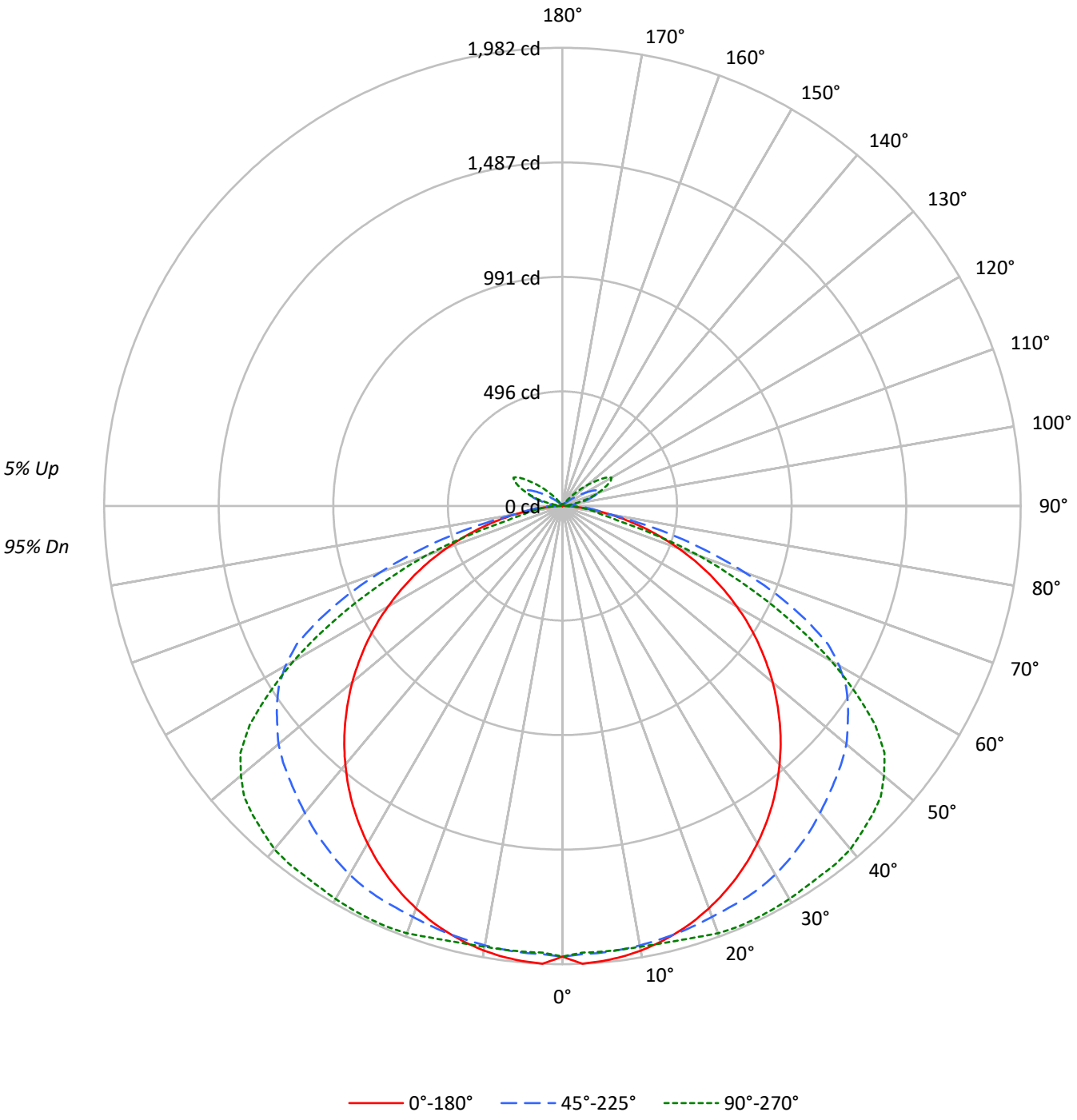
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	99	99	99	99	96	96	96	96	91	91	91	86	86	86	82	82	82	80
1	90	86	82	79	87	84	80	77	79	76	74	75	73	71	71	70	68	66
2	81	74	68	63	79	72	67	62	69	64	60	65	61	58	62	59	56	54
3	74	65	58	52	71	63	56	51	60	54	50	57	52	48	54	50	47	45
4	67	57	49	43	65	55	48	43	53	47	42	50	45	41	48	43	40	38
5	62	50	43	37	59	49	42	36	47	40	36	45	39	35	43	38	34	32
6	57	45	37	32	55	44	37	31	42	36	31	40	35	30	38	33	30	28
7	52	41	33	28	51	40	33	27	38	32	27	36	31	26	35	30	26	24
8	48	37	30	24	47	36	29	24	35	28	24	33	28	23	32	27	23	21
9	45	34	27	22	44	33	26	22	32	26	21	30	25	21	29	24	21	19
10	42	31	24	20	41	30	24	19	29	23	19	28	23	19	27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4794	4794	4794
5°	4879	4790	4778
10°	4878	4821	4836
15°	4866	4874	4953
20°	4848	4950	5149
25°	4823	5081	5349
30°	4789	5229	5575
35°	4747	5381	5855
40°	4691	5565	6223
45°	4623	5809	6585
50°	4542	6134	6945
55°	4434	6467	7080
60°	4290	6804	6617
65°	4103	6746	5716
70°	3826	6027	4524
75°	3469	4818	2452
80°	2918	2819	2026
85°	2258	3274	2173

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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	185.4	2.6	2.2
10°-20°	543.2	7.5	6.3
20°-30°	863.8	12.0	10.0
30°-40°	1113.1	15.4	12.9
40°-50°	1270.4	17.6	14.8
50°-60°	1271.5	17.6	14.8
60°-70°	990.5	13.7	11.5
70°-80°	486.8	6.7	5.7
80°-90°	131.2	1.8	1.5
90°-100°	34.5	0.5	0.4
100°-110°	91.8	1.3	1.1
110°-120°	121.3	1.7	1.4
120°-130°	78.5	1.1	0.9
130°-140°	25.8	0.4	0.3
140°-150°	6.8	0.1	0.1
150°-160°	3.3	0.0	0.0
160°-170°	2.1	0.0	0.0
170°-180°	0.7	0.0	0.0
0°-30°	1592.4	22.1	18.5
0°-40°	2705.5	37.5	31.5
0°-60°	5247.5	72.7	61.0
0°-90°	6856.1	94.9	79.7
90°-120°	247.6	3.4	2.9
90°-150°	358.7	5.0	4.2
90°-180°	365.0	5.1	4.2
0°-180°	7220.9	100.0	84.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1949	1949	1949	1949	1949	
5°	1976	1946	1940	1940	1935	188
15°	1911	1895	1914	1938	1945	539
25°	1777	1788	1872	1951	1971	819
35°	1581	1635	1792	1906	1950	988
45°	1329	1460	1670	1838	1893	1025
55°	1034	1233	1508	1646	1651	924
65°	705	994	1159	1038	982	697
75°	365	663	507	316	258	386
85°	80	166	116	83	77	92
90°	6	73	39	16	11	6
95°	0	53	29	12	9	0
105°	0	76	120	108	102	0
115°	2	19	162	213	213	2
125°	2	8	70	166	202	2
135°	3	6	20	58	83	3
145°	5	6	9	17	21	3
155°	5	6	7	8	8	2
165°	7	8	8	8	6	2
175°	8	8	7	7	6	1
180°	7	7	7	7	7	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*1949*	1949	1949	1949	1949
2.5°	*1982*	*1950*	*1941*	*1940*	*1934*
5°	*1976*	1946	1940	1940	1935
7.5°	*1967*	1939	1936	1939	1936
10°	*1953*	1928	1930	1938	1936
12.5°	*1934*	1913	1922	1938	1939
15°	*1911*	1895	1914	1938	1945
17.5°	*1884*	1874	1903	1942	1954
20°	*1852*	1848	1891	1949	1967
22.5°	*1816*	1820	1881	1953	1972
25°	*1777*	1788	1872	1951	1971
27.5°	*1733*	1752	1859	1942	1968
30°	*1686*	1715	1841	1933	1963
32.5°	*1635*	1676	1818	1920	1955
35°	*1581*	1635	1792	1906	1950
37.5°	*1522*	1593	1765	1895	1947
40°	*1461*	1551	1733	1885	1938
42.5°	*1397*	1508	1701	1867	1915
45°	*1329*	1460	1670	1838	1893
47.5°	*1259*	1410	1639	1809	1866
50°	*1187*	1354	1603	1774	1815
52.5°	*1111*	1294	1555	1716	1755
55°	*1034*	1233	1508	1646	1651
57.5°	*955*	1172	1455	1533	1503
60°	*872*	1112	1383	1379	1345
62.5°	*789*	1055	1295	1214	1165
65°	*705*	994	1159	1038	982
67.5°	*620*	918	1004	853	796
70°	*532*	845	838	675	629
72.5°	*447*	763	668	505	435
75°	*365*	663	507	316	258
77.5°	*284*	530	342	187	178
80°	*206*	397	199	149	143
82.5°	*139*	272	153	115	110
85°	*80*	166	116	83	77
87.5°	*35*	125	79	49	42
90°	*6*	73	39	16	11
92.5°	*0*	52	30	12	8
95°	*0*	53	29	12	9
97.5°	*0*	64	45	19	13
100°	*0*	78	70	48	39
102.5°	*0*	86	95	79	71
105°	*0*	76	120	108	102
107.5°	*0*	61	143	137	132
110°	*1*	45	163	165	161

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	*1*	31	174	191	189
115°	*2*	19	162	213	213
117.5°	*2*	14	139	227	235
120°	*2*	14	115	222	245
122.5°	*2*	10	93	195	232
125°	*2*	8	70	166	202
127.5°	*3*	7	50	137	171
130°	*3*	7	32	110	141
132.5°	*3*	6	20	83	111
135°	*3*	6	20	58	83
137.5°	*4*	6	17	37	57
140°	*4*	6	12	22	36
142.5°	*4*	5	10	21	21
145°	*5*	6	9	17	21
147.5°	*5*	5	8	10	14
150°	*4*	6	8	10	10
152.5°	*5*	6	8	9	8
155°	*5*	6	7	8	8
157.5°	*6*	6	7	8	7
160°	*6*	7	7	8	6
162.5°	*7*	7	8	8	7
165°	*7*	8	8	8	6
167.5°	*7*	7	8	7	7
170°	*8*	8	8	7	7
172.5°	*8*	8	8	7	6
175°	*8*	8	7	7	6
177.5°	*8*	7	7	6	5
180°	*7*	7	7	7	7

(END OF REPORT)