

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: 223P131

Luminaire Tested: **2RDI-228FLS**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 223P131
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDI-228FLS
Description: 2 X 4 RDI CENTER MOUNT SERIES LUMINAIRE WITH AN OPAQUE RIBBED LENS.
Light Source: TWO - F28T5/835 - 2600 LUMENS EA. - 28 WATTS EA.
Ballast/Driver: TRIAD B228PUNV-C

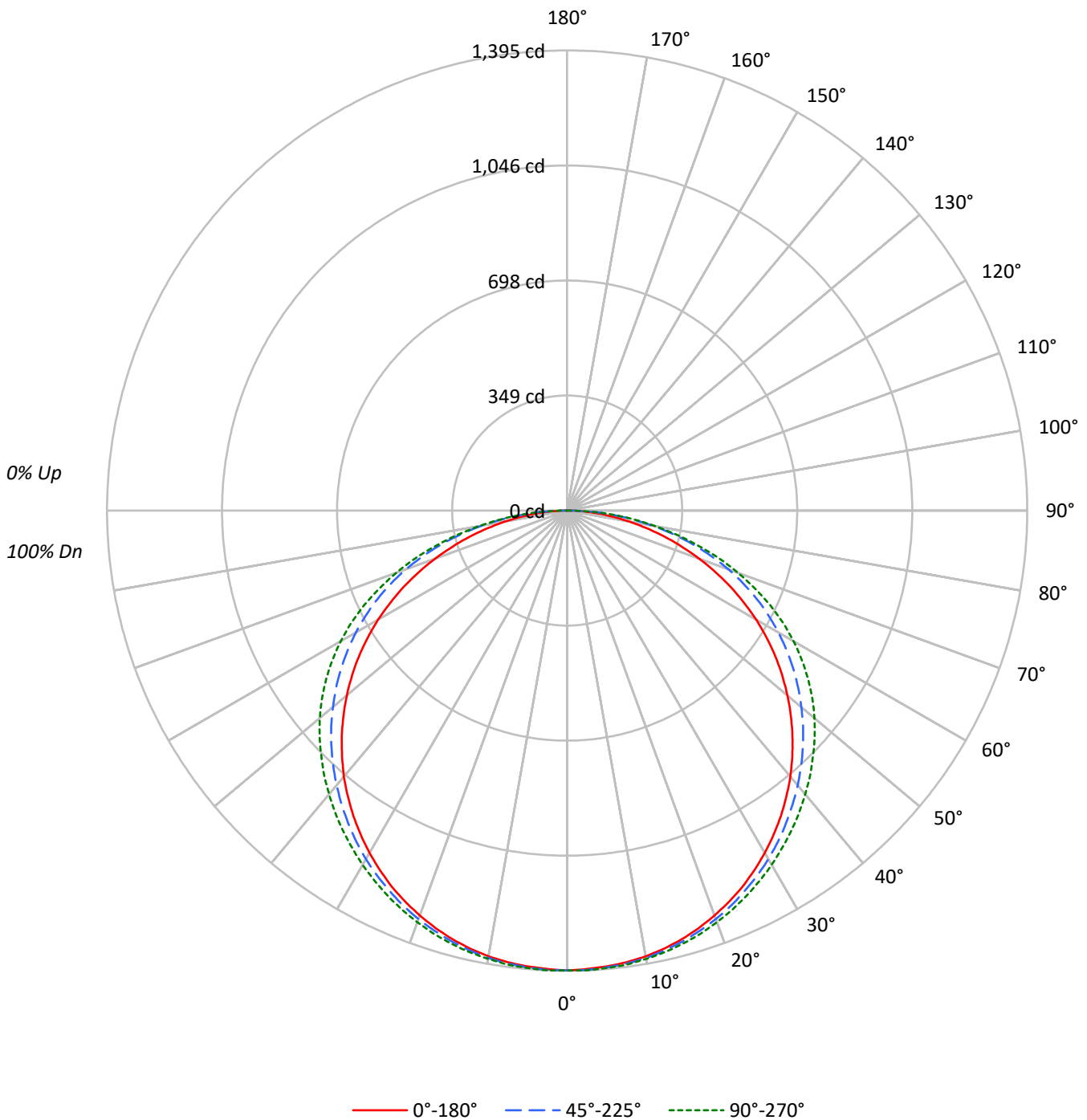
Summary

Lumens per Lamp: 2600 (2 lamps)
Luminaire Lumens: 4509.8 lumens
Efficiency: 86.7%
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.32 / 1.43
Luminous Opening: Rectangular (W 1.86' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 65
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	0
RCR																		
0	103	103	103	103	101	101	101	101	96	96	96	92	92	92	88	88	88	87
1	93	89	85	81	91	87	83	80	83	80	77	80	77	75	77	75	73	71
2	84	77	70	65	82	75	69	64	72	67	63	69	65	61	66	63	60	58
3	77	67	59	53	74	65	58	53	63	57	52	60	55	51	58	54	50	48
4	70	59	51	45	68	58	50	44	55	49	44	53	48	43	51	47	43	41
5	64	52	44	38	62	51	44	38	50	43	38	48	42	37	46	41	37	35
6	59	47	39	33	57	46	39	33	45	38	33	43	37	32	42	36	32	30
7	55	43	35	29	53	42	34	29	40	34	29	39	33	29	38	32	28	27
8	51	39	31	26	49	38	31	26	37	30	26	36	30	25	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	31	25	21	30	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2066	2066	2066
5°	2063	2068	2071
10°	2064	2072	2076
15°	2063	2074	2085
20°	2059	2078	2094
25°	2057	2081	2106
30°	2050	2087	2122
35°	2044	2093	2144
40°	2037	2103	2172
45°	2024	2119	2209
50°	2010	2137	2257
55°	1992	2162	2304
60°	1962	2193	2350
65°	1914	2226	2381
70°	1846	2253	2387
75°	1746	2256	2359
80°	1621	2227	2304
85°	1479	2227	2295



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	132.3	2.9	2.5	0°	1394	1394	1394	1394	1394	
10°-20°	381.9	8.5	7.3	5°	1387	1388	1390	1392	1392	132
20°-30°	587.3	13.0	11.3	15°	1345	1348	1352	1357	1359	380
30°-40°	725.0	16.1	13.9	25°	1258	1265	1273	1283	1288	580
40°-50°	780.8	17.3	15.0	35°	1130	1143	1157	1176	1185	707
50°-60°	746.6	16.6	14.4	45°	966	985	1011	1041	1054	745
60°-70°	617.0	13.7	11.9	55°	771	798	837	877	892	688
70°-80°	400.2	8.9	7.7	65°	546	584	635	668	679	539
80°-90°	137.3	3.0	2.6	75°	305	359	394	410	412	323
90°-100°	1.3	0.0	0.0	85°	87	120	131	135	135	92
100°-110°	0.0	0.0	0.0	90°	6	10	11	10	10	7
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	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°	1101.5	24.4	21.2	165°	0	0	0	0	0	0
0°-40°	1826.6	40.5	35.1	175°	0	0	0	0	0	0
0°-60°	3353.9	74.4	64.5	180°	0	0	0	0	0	0
0°-90°	4508.5	100.0	86.7							
90°-120°	1.3	0.0	0.0							
90°-150°	1.3	0.0	0.0							
90°-180°	1.0	0.0	0.0							
0°-180°	4509.8	100.0	86.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1394	1394	1394	1394	1394
2.5°	1391	1391	1394	1395	1395
5°	1387	1388	1390	1392	1392
7.5°	1381	1382	1385	1387	1388
10°	1372	1373	1377	1380	1380
12.5°	1360	1362	1366	1370	1371
15°	1345	1348	1352	1357	1359
17.5°	1327	1331	1336	1342	1345
20°	1306	1311	1318	1325	1328
22.5°	1283	1289	1297	1305	1309
25°	1258	1265	1273	1283	1288
27.5°	1229	1238	1248	1259	1265
30°	1198	1208	1220	1233	1240
32.5°	1165	1176	1190	1205	1213
35°	1130	1143	1157	1176	1185
37.5°	1092	1106	1123	1144	1155
40°	1053	1068	1087	1111	1123
42.5°	1010	1028	1050	1077	1090
45°	966	985	1011	1041	1054
47.5°	920	941	970	1003	1018
50°	872	895	927	963	979
52.5°	822	847	883	921	937
55°	771	798	837	877	892
57.5°	717	746	789	829	844
60°	662	693	740	779	793
62.5°	604	639	688	725	738
65°	546	584	635	668	679
67.5°	486	528	578	608	616
70°	426	472	520	543	551
72.5°	365	415	458	476	484
75°	305	359	394	410	412
77.5°	246	301	328	338	340
80°	190	241	261	269	270
82.5°	136	180	195	200	201
85°	87	120	131	135	135
87.5°	42	62	69	71	70
90°	6	10	11	10	10
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	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)