

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: 223p143

Luminaire Tested: **2RDI-228T5RP-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 223p143
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDI-228T5RP-UNV-EBT1
Description: 2'X4' RECESSED DIRECT/INDIRECT LUMINAIRE WITH CENTER MOUNTED
ROUND PERFORATED WHITE STEEL BASKET, ACRYLIC OVERLAY (OLD BODY STYLE)
Light Source: TWO - PHILIPS- TL5HE28W/835 - 2600 LUMENS - 28 WATTS
Ballast/Driver: ACCUSTART B228PUNV90-C

Summary

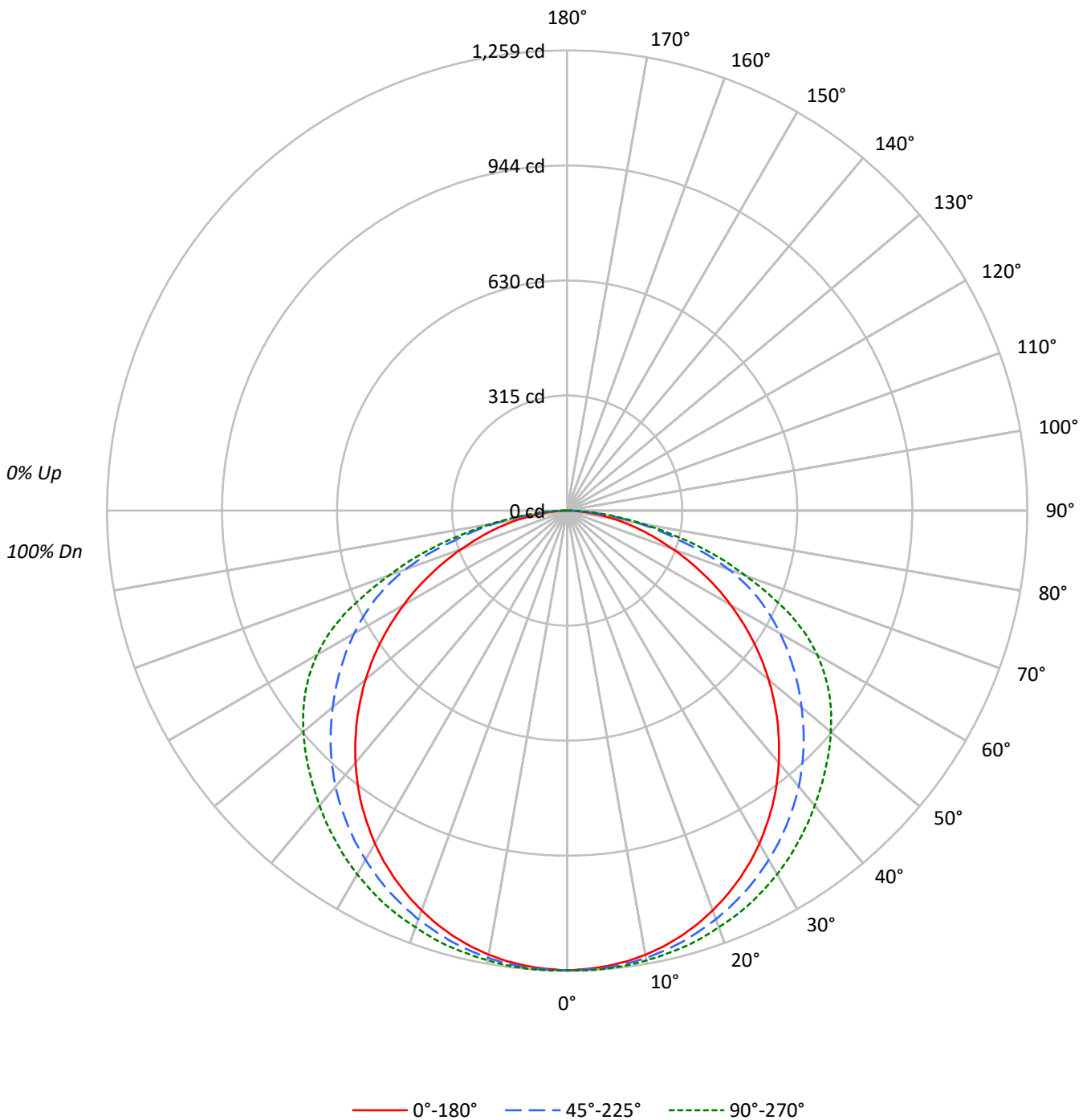
Lumens per Lamp: 2600 (2 lamps)
Luminaire Lumens: 3997.2 lumens
Efficiency: 76.9%
Efficacy: 71.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.36 / 1.44
Luminous Opening: Rectangular (W 1.88' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 56
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: 223p143

CATALOG NUMBER: 2RDI-228T5RP-UNV-EBT1

Luminous Intensity Polar Plot





TEST NUMBER: 223p143

CATALOG NUMBER: 2RDI-228T5RP-UNV-EBT1

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	92	92	92	92	89	89	89	89	85	85	85	82	82	82	78	78	78	77
1	83	79	76	73	81	77	74	71	74	72	69	71	69	67	68	67	65	63
2	75	69	63	58	73	67	62	58	64	60	56	62	58	55	59	56	54	52
3	68	60	53	48	66	59	52	48	56	51	47	54	50	46	52	48	45	43
4	62	53	46	40	60	52	45	40	50	44	39	48	43	39	46	42	38	37
5	57	47	40	34	55	46	39	34	44	38	34	43	38	33	41	37	33	31
6	53	42	35	30	51	41	35	30	40	34	29	39	33	29	37	33	29	27
7	49	38	31	26	47	37	31	26	36	30	26	35	30	26	34	29	26	24
8	45	35	28	23	44	34	28	23	33	27	23	32	27	23	31	26	23	21
9	42	32	25	21	41	31	25	21	30	25	21	30	24	21	29	24	20	19
10	40	29	23	19	39	29	23	19	28	23	19	27	22	19	27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1844	1844	1844
5°	1841	1847	1851
10°	1837	1850	1860
15°	1829	1853	1876
20°	1816	1856	1892
25°	1800	1861	1918
30°	1780	1867	1945
35°	1755	1875	1975
40°	1724	1887	2017
45°	1687	1897	2073
50°	1642	1909	2148
55°	1587	1934	2239
60°	1516	1973	2319
65°	1425	2018	2338
70°	1320	2023	2220
75°	1206	1829	2067
80°	1080	1654	1781
85°	858	1329	1429



TEST NUMBER: 223p143

CATALOG NUMBER: 2RDI-228T5RP-UNV-EBT1

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	119.4	3.0	2.3	0°	1258	1258	1258	1258	1258	
10°-20°	344.7	8.6	6.6	5°	1251	1252	1255	1258	1258	119
20°-30°	530.3	13.3	10.2	15°	1205	1210	1221	1231	1236	340
30°-40°	654.4	16.4	12.6	25°	1113	1124	1151	1176	1186	513
40°-50°	703.1	17.6	13.5	35°	981	1002	1048	1089	1104	613
50°-60°	674.1	16.9	13.0	45°	814	849	915	973	1000	627
60°-70°	553.3	13.8	10.6	55°	621	671	757	843	876	554
70°-80°	329.9	8.3	6.3	65°	411	472	582	654	674	408
80°-90°	88.0	2.2	1.7	75°	213	277	323	358	365	226
90°-100°	0.0	0.0	0.0	85°	51	66	79	84	85	61
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	994.4	24.9	19.1							
0°-40°	1648.8	41.2	31.7							
0°-60°	3026.0	75.7	58.2							
0°-90°	3997.2	100.0	76.9							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	3997.2	100.0	76.9							



TEST NUMBER: 223p143

CATALOG NUMBER: 2RDI-228T5RP-UNV-EBT1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1258	1258	1258	1258	1258
2.5°	1255	1255	1257	1259	1259
5°	1251	1252	1255	1258	1258
7.5°	1244	1246	1250	1253	1255
10°	1234	1236	1243	1247	1250
12.5°	1221	1224	1233	1240	1243
15°	1205	1210	1221	1231	1236
17.5°	1186	1192	1206	1220	1226
20°	1164	1172	1190	1207	1213
22.5°	1140	1149	1171	1192	1201
25°	1113	1124	1151	1176	1186
27.5°	1084	1097	1128	1157	1168
30°	1052	1067	1103	1136	1149
32.5°	1017	1035	1077	1114	1128
35°	981	1002	1048	1089	1104
37.5°	942	966	1018	1063	1080
40°	901	929	986	1034	1054
42.5°	858	889	951	1004	1027
45°	814	849	915	973	1000
47.5°	767	806	877	942	972
50°	720	762	837	910	942
52.5°	671	717	798	878	910
55°	621	671	757	843	876
57.5°	569	622	716	804	836
60°	517	573	673	762	791
62.5°	465	523	629	712	738
65°	411	472	582	654	674
67.5°	359	422	531	585	596
70°	308	373	472	500	518
72.5°	259	325	403	431	446
75°	213	277	323	358	365
77.5°	169	227	260	281	283
80°	128	171	196	208	211
82.5°	88	110	134	142	144
85°	51	66	79	84	85
87.5°	21	28	33	34	35
90°	0	0	0	0	0

(END OF REPORT)