

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P393708

Luminaire Tested: **24EN-LD2-74-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393708
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-74-UNV-L83050-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 7400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7370.9 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

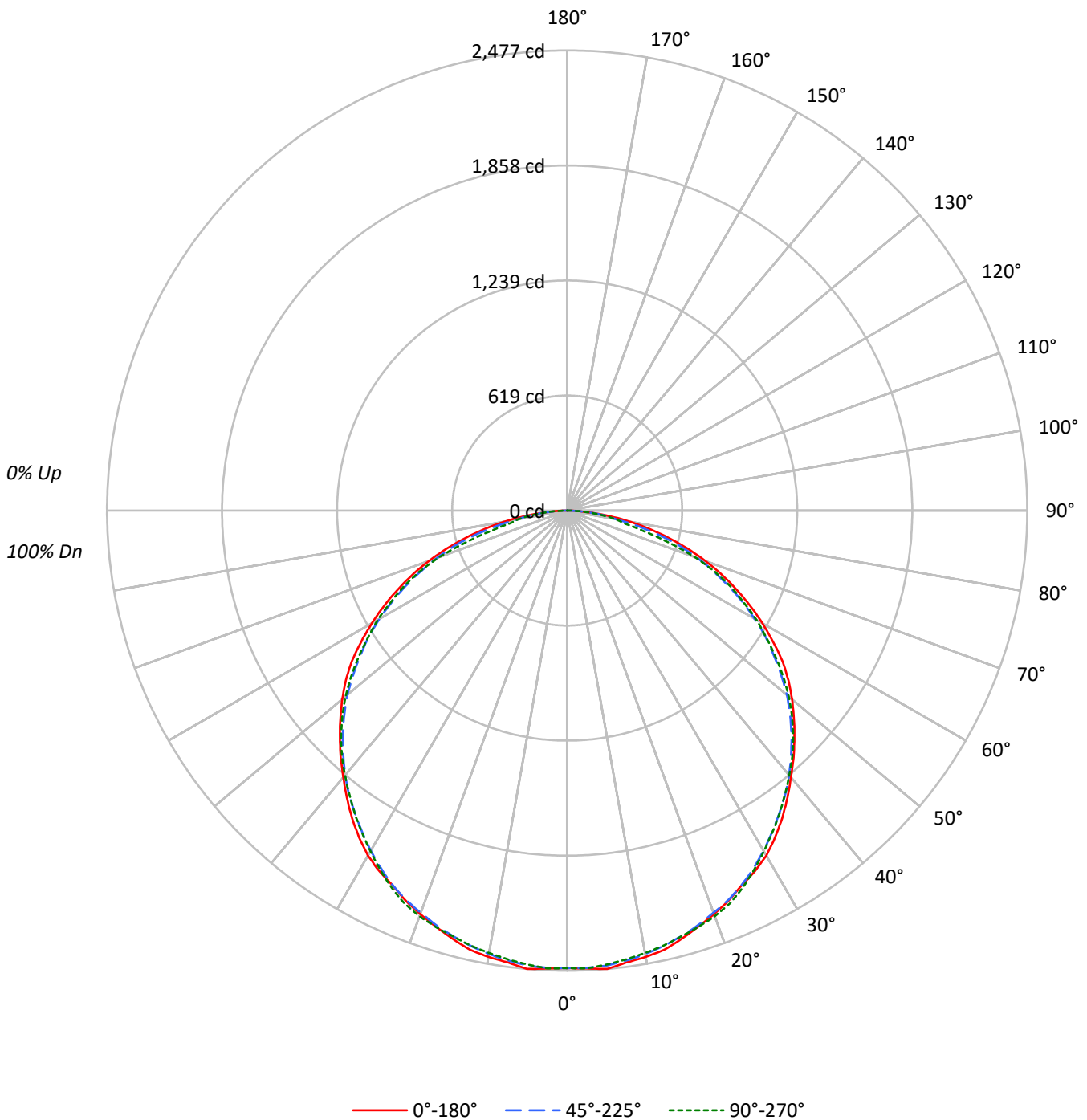
Input Watts (W): 55.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3314	3314	3314
5°	3346	3320	3313
10°	3334	3312	3304
15°	3324	3304	3305
20°	3310	3299	3328
25°	3303	3302	3322
30°	3331	3284	3291
35°	3316	3269	3272
40°	3292	3265	3267
45°	3292	3252	3275
50°	3307	3232	3259
55°	3322	3188	3211
60°	3267	3138	3170
65°	3206	3047	3098
70°	3108	2939	2872
75°	2937	2698	2215
80°	2619	2084	2046
85°	2053	1930	1775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.5	3.2
10°-20°	670.8	9.1
20°-30°	1025.3	13.9
30°-40°	1250.0	17.0
40°-50°	1323.0	17.9
50°-60°	1226.2	16.6
60°-70°	961.9	13.1
70°-80°	536.7	7.3
80°-90°	143.5	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1929.6	26.2
0°-40°	3179.6	43.1
0°-60°	5728.8	77.7
0°-90°	7370.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7370.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2463	2463	2463	2463	2463	
5°	2477	2454	2458	2453	2453	235
15°	2386	2377	2372	2371	2373	673
25°	2225	2227	2224	2215	2238	1029
35°	2019	1995	1990	1997	1992	1263
45°	1730	1728	1709	1699	1721	1336
55°	1416	1378	1359	1362	1369	1259
65°	1007	989	957	967	973	995
75°	565	542	519	454	426	595
85°	133	126	125	117	115	159
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2463	2463	2463	2463	2463
2.5°	2467	2461	2464	2455	2467
5°	2477	2454	2458	2453	2453
7.5°	2453	2443	2443	2444	2437
10°	2440	2427	2424	2427	2418
12.5°	2421	2402	2400	2402	2398
15°	2386	2377	2372	2371	2373
17.5°	2348	2346	2341	2337	2350
20°	2312	2314	2304	2301	2324
22.5°	2272	2272	2268	2258	2289
25°	2225	2227	2224	2215	2238
27.5°	2189	2174	2171	2168	2180
30°	2144	2117	2114	2115	2118
32.5°	2085	2058	2053	2059	2055
35°	2019	1995	1990	1997	1992
37.5°	1948	1934	1928	1928	1926
40°	1874	1868	1859	1856	1860
42.5°	1804	1803	1784	1780	1795
45°	1730	1728	1709	1699	1721
47.5°	1656	1648	1627	1617	1642
50°	1580	1561	1544	1541	1557
52.5°	1501	1471	1451	1449	1465
55°	1416	1378	1359	1362	1369
57.5°	1315	1286	1267	1266	1270
60°	1214	1189	1166	1169	1178
62.5°	1111	1091	1063	1072	1072
65°	1007	989	957	967	973
67.5°	901	881	850	855	861
70°	790	768	747	728	730
72.5°	678	654	640	592	578
75°	565	542	519	454	426
77.5°	450	437	393	323	313
80°	338	332	269	265	264
82.5°	234	224	205	193	190
85°	133	126	125	117	115
87.5°	47	50	51	51	51
90°	0	0	0	0	0

(END OF REPORT)