

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: P393709

Luminaire Tested: **24EN-LD2-74-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-40)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-74-UNV-L83050-W2A-1-U (4000K)
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: 7402.3 lumens
Efficiency: N/A
Efficacy: 133.4 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

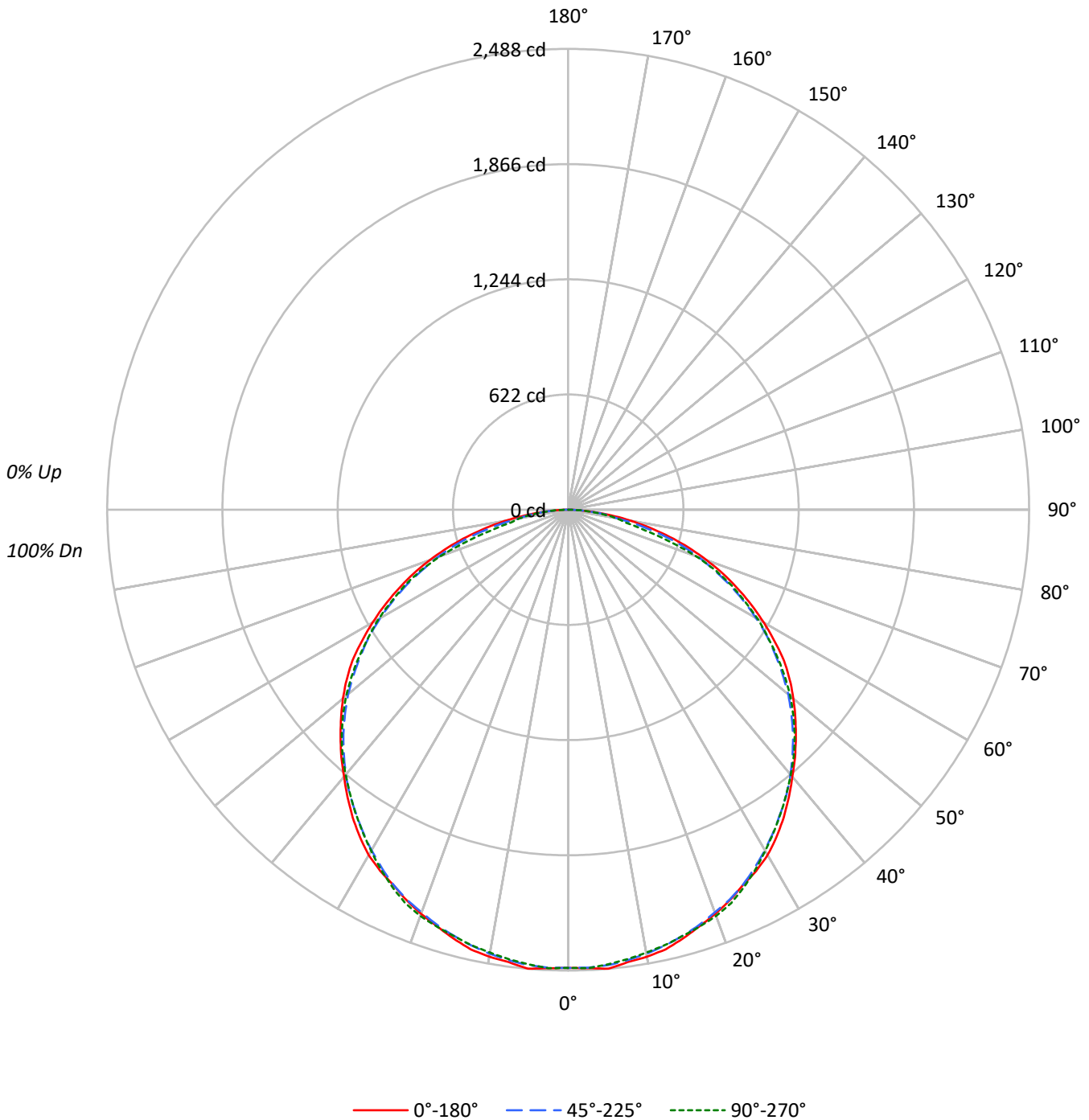
Input Watts (W): 55.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3328	3328	3328
5°	3360	3334	3327
10°	3348	3326	3318
15°	3338	3318	3320
20°	3324	3313	3342
25°	3317	3316	3337
30°	3345	3298	3305
35°	3330	3283	3286
40°	3306	3279	3281
45°	3306	3266	3289
50°	3321	3246	3273
55°	3336	3202	3225
60°	3281	3151	3183
65°	3220	3060	3111
70°	3121	2951	2884
75°	2950	2709	2224
80°	2630	2093	2054
85°	2062	1937	1783



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.5	3.2
10°-20°	673.6	9.1
20°-30°	1029.6	13.9
30°-40°	1255.4	17.0
40°-50°	1328.6	17.9
50°-60°	1231.4	16.6
60°-70°	966.0	13.1
70°-80°	538.9	7.3
80°-90°	144.1	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°	1937.8	26.2
0°-40°	3193.1	43.1
0°-60°	5753.2	77.7
0°-90°	7402.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7402.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2474	2474	2474	2474	2474	
5°	2488	2464	2468	2463	2463	236
15°	2396	2387	2382	2381	2383	676
25°	2234	2236	2234	2224	2248	1034
35°	2028	2004	1998	2006	2000	1268
45°	1737	1735	1716	1706	1728	1342
55°	1422	1384	1365	1368	1375	1265
65°	1011	993	961	971	977	999
75°	567	544	521	456	428	598
85°	134	126	126	118	116	159
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2473.5	2473.5	2473.5	2473.5	2473.5
2.5°	2477.5	2471.5	2474.5	2465.4	2477.5
5°	2487.5	2464.4	2468.5	2463.4	2463.4
7.5°	2463.4	2453.4	2453.4	2454.4	2447.4
10°	2450.4	2437.3	2434.3	2437.3	2428.3
12.5°	2431.3	2412.2	2410.2	2412.2	2408.2
15°	2396.1	2387.1	2382.1	2381.1	2383.1
17.5°	2358.0	2356.0	2351.0	2346.9	2360.0
20°	2321.8	2323.8	2313.8	2310.8	2333.9
22.5°	2281.7	2281.7	2277.6	2267.6	2298.7
25°	2234.5	2236.5	2233.5	2224.4	2247.5
27.5°	2198.3	2183.2	2180.2	2177.2	2189.3
30°	2153.1	2126.0	2123.0	2124.0	2127.0
32.5°	2093.9	2066.8	2061.7	2067.8	2063.7
35°	2027.6	2003.5	1998.5	2005.5	2000.5
37.5°	1956.3	1942.2	1936.2	1936.2	1934.2
40°	1882.0	1875.9	1866.9	1863.9	1867.9
42.5°	1811.7	1810.7	1791.6	1787.6	1802.6
45°	1737.4	1735.3	1716.3	1706.2	1728.3
47.5°	1663.0	1655.0	1633.9	1623.9	1649.0
50°	1586.7	1567.6	1550.6	1547.6	1563.6
52.5°	1507.4	1477.3	1457.2	1455.2	1471.2
55°	1422.0	1383.9	1364.8	1367.8	1374.8
57.5°	1320.6	1291.5	1272.4	1271.4	1275.4
60°	1219.2	1194.1	1171.0	1174.0	1183.0
62.5°	1115.7	1095.6	1067.5	1076.6	1076.6
65°	1011.3	993.2	961.1	971.1	977.1
67.5°	904.8	884.7	853.6	858.6	864.7
70°	793.4	771.3	750.2	731.1	733.1
72.5°	680.9	656.8	642.7	594.5	580.5
75°	567.4	544.3	521.2	455.9	427.8
77.5°	451.9	438.9	394.7	324.4	314.3
80°	339.4	333.4	270.1	266.1	265.1
82.5°	235.0	225.0	205.9	193.8	190.8
85°	133.6	126.5	125.5	117.5	115.5
87.5°	47.2	50.2	51.2	51.2	51.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)