

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: P182392

Luminaire Tested: **24FR-65-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26767)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FR-65-UNV-L840-CD1-U
Description: METALUX 2X4 FR TROFFER LED FIXTURE

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6896.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

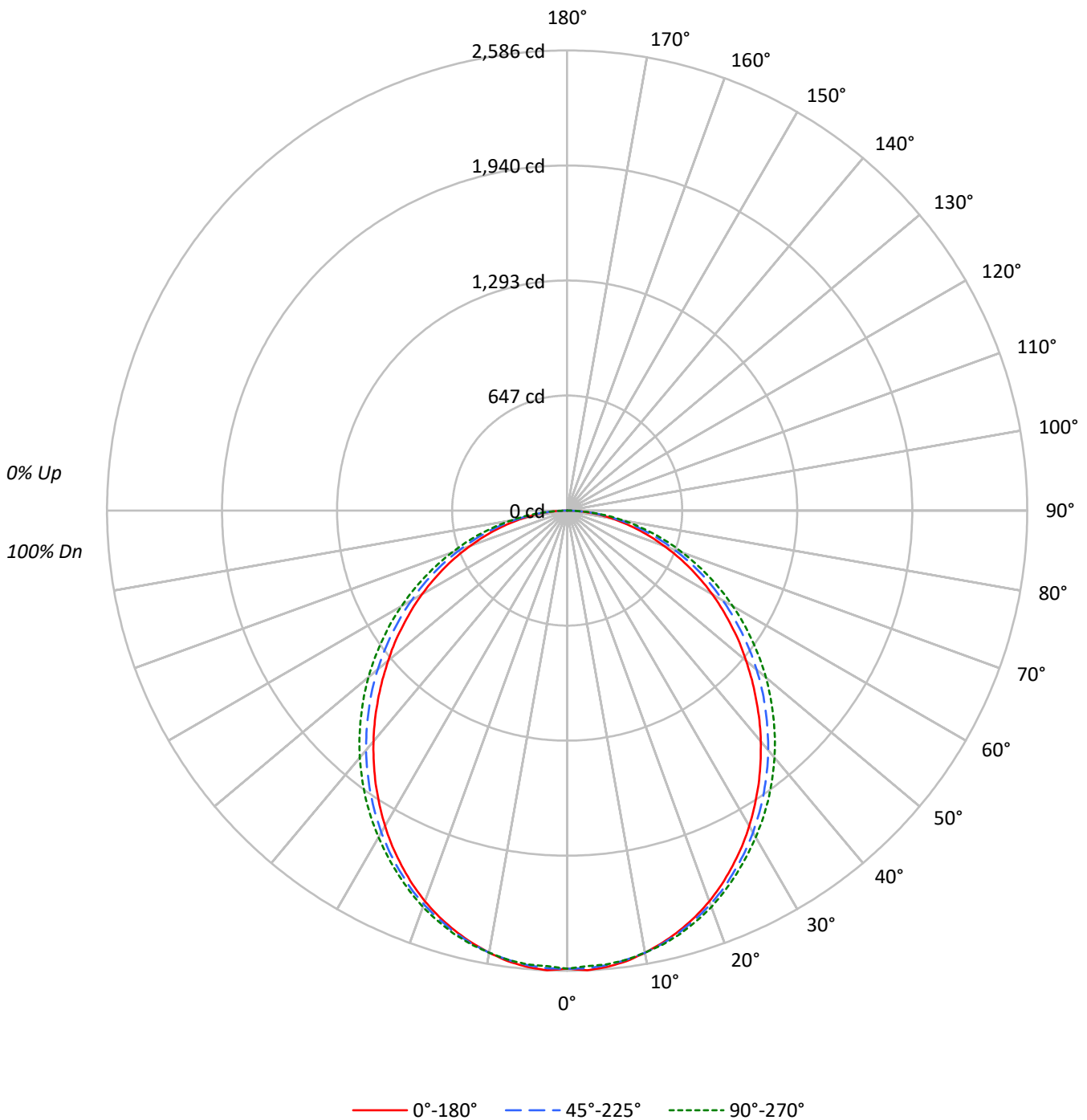
Input Watts (W): 65.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70					70			
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62	70	65	61	59					59			
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50					50			
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44					44			
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	41	36	34					34			
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30					30			
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27					27			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3464	3464	3464
5°	3477	3463	3457
10°	3447	3447	3447
15°	3403	3415	3429
20°	3346	3372	3394
25°	3268	3312	3344
30°	3180	3244	3293
35°	3081	3168	3242
40°	2974	3088	3184
45°	2860	2998	3118
50°	2746	2910	3052
55°	2642	2813	2973
60°	2535	2718	2892
65°	2419	2625	2809
70°	2277	2519	2708
75°	2139	2406	2613
80°	1979	2262	2493
85°	1766	2100	2279



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	3.5
10°-20°	690.1	10.0
20°-30°	1024.7	14.9
30°-40°	1202.4	17.4
40°-50°	1213.1	17.6
50°-60°	1071.7	15.5
60°-70°	814.2	11.8
70°-80°	487.2	7.1
80°-90°	149.3	2.2
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°	1958.0	28.4
0°-40°	3160.4	45.8
0°-60°	5445.3	79.0
0°-90°	6896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6896.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2574	2574	2574	2574	2574	
5°	2574	2554	2564	2561	2559	244
15°	2443	2432	2452	2458	2462	688
25°	2201	2198	2231	2242	2252	1014
35°	1876	1883	1929	1956	1974	1172
45°	1503	1519	1576	1622	1639	1160
55°	1126	1144	1199	1251	1267	1009
65°	760	778	824	866	882	752
75°	411	431	463	489	503	436
85°	114	124	136	144	148	129
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2574.3	2574.3	2574.3	2574.3	2574.3
2.5°	2585.9	2566.0	2574.3	2570.9	2562.7
5°	2574.3	2554.4	2564.3	2561.0	2559.3
7.5°	2554.4	2536.1	2546.1	2546.1	2546.1
10°	2522.8	2507.9	2522.8	2522.8	2522.8
12.5°	2486.4	2473.1	2491.3	2493.0	2496.3
15°	2443.2	2431.6	2451.5	2458.2	2461.5
17.5°	2393.5	2383.5	2405.1	2415.0	2418.3
20°	2337.1	2327.1	2355.3	2362.0	2370.2
22.5°	2272.4	2267.4	2297.3	2303.9	2313.9
25°	2201.1	2197.7	2230.9	2242.5	2252.5
27.5°	2128.1	2126.4	2162.9	2177.8	2187.8
30°	2046.8	2048.5	2088.3	2106.5	2119.8
32.5°	1962.2	1967.2	2010.3	2031.9	2048.5
35°	1876.0	1882.6	1929.0	1955.6	1973.8
37.5°	1784.7	1794.7	1844.4	1876.0	1894.2
40°	1693.5	1705.1	1758.2	1791.4	1812.9
42.5°	1599.0	1613.9	1667.0	1710.1	1728.3
45°	1502.8	1519.3	1575.7	1622.2	1638.8
47.5°	1408.2	1429.8	1484.5	1531.0	1549.2
50°	1312.0	1331.9	1390.0	1438.1	1458.0
52.5°	1222.4	1240.7	1295.4	1345.2	1363.4
55°	1126.2	1144.5	1199.2	1250.6	1267.2
57.5°	1035.0	1051.6	1104.7	1156.1	1172.7
60°	942.1	958.7	1010.1	1056.6	1074.8
62.5°	850.9	867.5	918.9	962.0	978.6
65°	759.7	777.9	824.4	865.8	882.4
67.5°	670.1	688.4	731.5	771.3	784.6
70°	578.9	598.8	640.2	676.7	688.4
72.5°	494.3	514.2	550.7	582.2	597.1
75°	411.4	431.3	462.8	489.3	502.6
77.5°	331.7	351.6	376.5	398.1	409.7
80°	255.4	273.7	291.9	313.5	321.8
82.5°	182.5	197.4	212.3	228.9	235.5
85°	114.4	124.4	136.0	144.3	147.6
87.5°	49.8	56.4	58.1	59.7	58.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)