

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: P184173

Luminaire Tested: **24FR-65-HP-UNV-L827-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27148)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FR-65-HP-UNV-L827-CD1-U
Description: METALUX 2X4 FR TROFFER LED HIGH EFFICIENCY FIXTURE

Light Source: EATON LED 2700K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

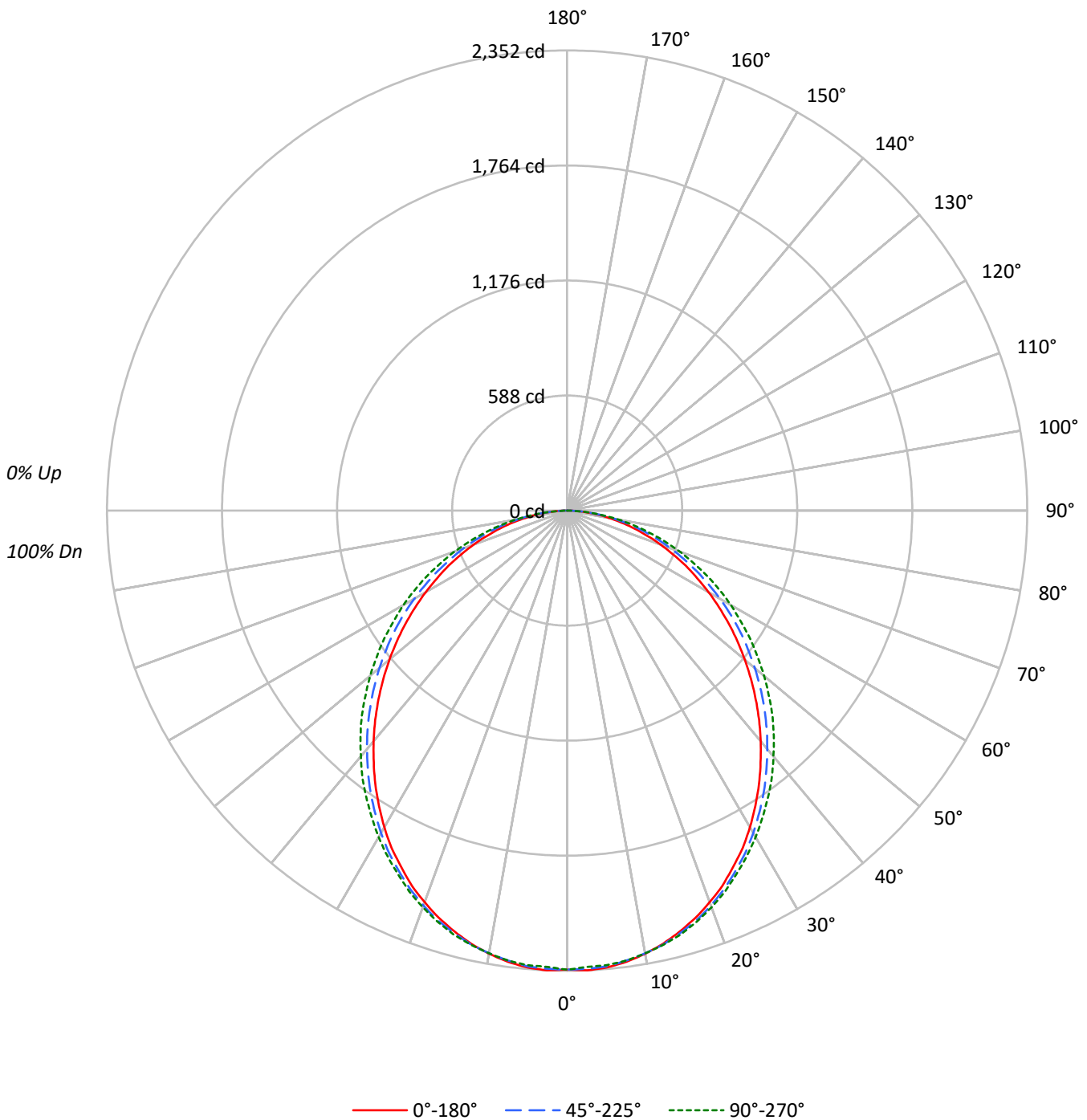
Lumens per Lamp: N/A
Luminaire Lumens: 6203.5 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.22 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 53.8
Input Voltage (V): NR
Input Current (A_{in}): 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	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3157	3157	3157
5°	3166	3158	3150
10°	3142	3139	3139
15°	3102	3113	3125
20°	3050	3076	3090
25°	2982	3021	3042
30°	2904	2957	2995
35°	2807	2880	2940
40°	2703	2796	2881
45°	2594	2709	2825
50°	2481	2621	2752
55°	2368	2534	2681
60°	2248	2428	2602
65°	2131	2318	2511
70°	1997	2212	2403
75°	1851	2092	2261
80°	1692	1943	2069
85°	1530	1655	1655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.6	3.6
10°-20°	629.3	10.1
20°-30°	934.3	15.1
30°-40°	1093.3	17.6
40°-50°	1097.4	17.7
50°-60°	961.2	15.5
60°-70°	721.5	11.6
70°-80°	424.0	6.8
80°-90°	120.9	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°	1785.2	28.8
0°-40°	2878.5	46.4
0°-60°	4937.1	79.6
0°-90°	6203.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6203.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2346	2346	2346	2346	2346	
5°	2344	2328	2338	2334	2332	222
15°	2227	2219	2235	2241	2243	628
25°	2008	2008	2035	2041	2049	925
35°	1709	1715	1754	1776	1790	1068
45°	1363	1379	1424	1462	1485	1052
55°	1009	1028	1080	1118	1143	902
65°	670	688	728	767	789	662
75°	356	376	402	423	435	378
85°	99	105	107	107	107	111
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2346.2	2346.2	2346.2	2346.2	2346.2
2.5°	2352.3	2338.1	2344.2	2342.2	2334.1
5°	2344.2	2328.0	2338.1	2334.1	2332.1
7.5°	2326.0	2309.8	2319.9	2319.9	2319.9
10°	2299.7	2287.6	2297.7	2297.7	2297.7
12.5°	2267.3	2257.2	2271.4	2273.4	2273.4
15°	2226.9	2218.8	2235.0	2241.0	2243.1
17.5°	2182.4	2176.3	2196.5	2202.6	2202.6
20°	2129.8	2125.8	2148.0	2154.1	2158.1
22.5°	2075.2	2069.1	2095.4	2099.5	2107.6
25°	2008.4	2008.4	2034.7	2040.8	2048.9
27.5°	1943.7	1941.7	1972.0	1982.2	1990.2
30°	1868.9	1868.9	1903.3	1917.4	1927.5
32.5°	1790.0	1796.1	1828.4	1846.6	1858.8
35°	1709.1	1715.2	1753.6	1775.8	1790.0
37.5°	1624.2	1634.3	1672.7	1701.0	1719.2
40°	1539.2	1553.4	1591.8	1624.2	1640.3
42.5°	1452.2	1464.4	1508.9	1545.3	1563.5
45°	1363.2	1379.4	1423.9	1462.3	1484.6
47.5°	1274.2	1294.5	1339.0	1381.4	1397.6
50°	1185.2	1203.4	1252.0	1294.5	1314.7
52.5°	1096.3	1114.5	1165.0	1205.5	1225.7
55°	1009.3	1027.5	1080.1	1118.5	1142.8
57.5°	920.3	940.5	991.1	1031.5	1049.7
60°	835.3	853.5	902.1	942.5	966.8
62.5°	750.4	770.6	813.1	855.6	877.8
65°	669.5	687.7	728.1	766.6	788.8
67.5°	586.6	608.8	643.2	681.6	697.8
70°	507.7	531.9	562.3	594.6	610.8
72.5°	430.8	453.1	481.4	507.7	521.8
75°	356.0	376.2	402.5	422.7	434.9
77.5°	285.2	307.4	325.6	343.8	349.9
80°	218.4	236.6	250.8	262.9	267.0
82.5°	157.8	169.9	176.0	186.1	188.1
85°	99.1	105.2	107.2	107.2	107.2
87.5°	42.5	44.5	40.5	32.4	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)