

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: P474278

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474278
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5316.5 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

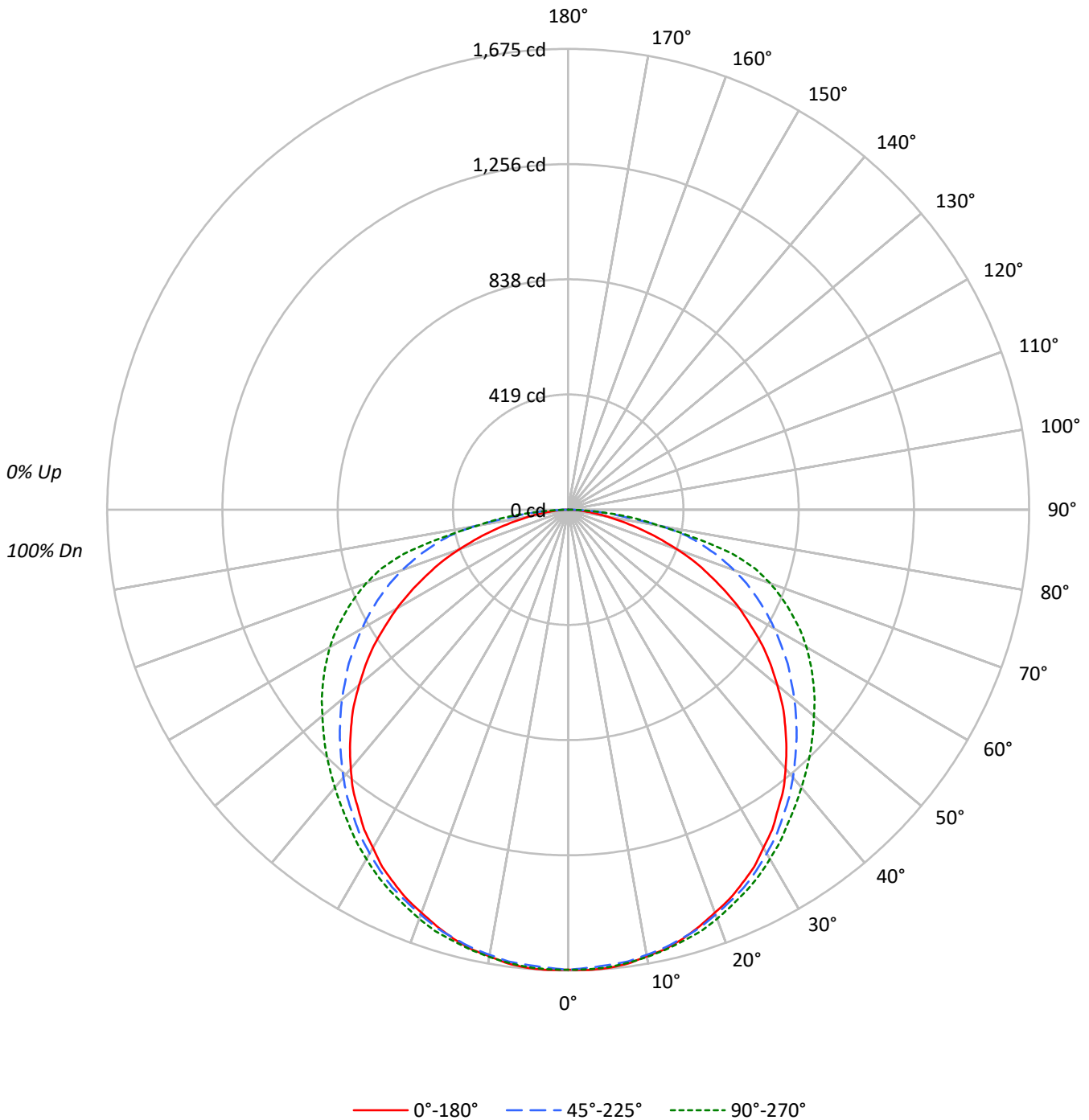
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2250	2250	2250
5°	2258	2244	2255
10°	2252	2245	2256
15°	2248	2244	2259
20°	2232	2243	2266
25°	2224	2247	2271
30°	2204	2241	2278
35°	2183	2235	2287
40°	2159	2232	2316
45°	2123	2233	2368
50°	2075	2247	2440
55°	2023	2282	2549
60°	1938	2327	2689
65°	1813	2409	2854
70°	1649	2521	3070
75°	1398	2660	3208
80°	1104	2676	2594
85°	815	2036	2282



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.6	3.0
10°-20°	456.4	8.6
20°-30°	698.0	13.1
30°-40°	853.2	16.0
40°-50°	909.4	17.1
50°-60°	869.5	16.4
60°-70°	736.6	13.9
70°-80°	495.0	9.3
80°-90°	139.7	2.6
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°	1313.0	24.7
0°-40°	2166.2	40.7
0°-60°	3945.2	74.2
0°-90°	5316.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5316.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1672	1669	1661	1669	1669	159
15°	1614	1614	1611	1624	1622	455
25°	1498	1503	1514	1527	1530	690
35°	1329	1340	1361	1387	1392	833
45°	1116	1134	1174	1224	1244	860
55°	862	894	973	1050	1086	768
65°	570	628	757	857	896	565
75°	269	366	512	599	617	288
85°	53	108	132	142	148	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1672.0	1672.0	1672.0	1672.0	1672.0
2.5°	1674.6	1674.6	1666.7	1672.0	1672.0
5°	1672.0	1669.3	1661.4	1669.3	1669.3
7.5°	1664.1	1661.4	1656.1	1664.1	1661.4
10°	1648.2	1648.2	1642.9	1650.9	1650.9
12.5°	1635.0	1632.4	1629.8	1640.3	1637.7
15°	1613.9	1613.9	1611.3	1624.5	1621.8
17.5°	1587.5	1590.2	1592.8	1603.4	1606.0
20°	1558.5	1563.8	1566.4	1582.3	1582.3
22.5°	1532.1	1534.8	1540.0	1555.9	1555.9
25°	1497.8	1503.1	1513.7	1526.9	1529.5
27.5°	1463.5	1466.2	1479.4	1497.8	1500.5
30°	1418.7	1426.6	1442.4	1463.5	1466.2
32.5°	1379.1	1387.0	1405.5	1426.6	1431.9
35°	1329.0	1339.5	1360.6	1387.0	1392.3
37.5°	1284.1	1292.0	1318.4	1347.4	1355.4
40°	1229.0	1244.5	1270.9	1305.2	1318.4
42.5°	1173.6	1189.4	1221.1	1265.7	1281.5
45°	1115.5	1134.0	1173.6	1223.7	1244.5
47.5°	1057.5	1078.6	1123.4	1181.5	1205.2
50°	991.5	1017.9	1073.3	1139.3	1165.7
52.5°	928.2	959.9	1020.5	1094.4	1128.7
55°	862.2	893.9	973.0	1049.6	1086.5
57.5°	788.4	830.6	917.6	1004.7	1044.3
60°	720.0	759.3	864.9	959.9	999.4
62.5°	646.1	698.9	812.1	912.4	951.9
65°	569.6	627.7	756.7	857.0	896.5
67.5°	501.0	564.4	701.6	801.6	841.1
70°	419.2	498.4	640.9	740.9	780.4
72.5°	342.7	429.8	577.6	675.2	712.1
75°	268.9	366.5	511.6	598.7	617.1
77.5°	200.5	303.2	443.0	479.9	466.7
80°	142.5	242.7	345.4	326.9	334.8
82.5°	92.3	184.7	213.7	242.7	250.4
85°	52.8	108.2	131.9	142.5	147.8
87.5°	23.7	39.6	52.8	52.8	50.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)