

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: P473866

Luminaire Tested: **24CZ2-55-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473866
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5557.6 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

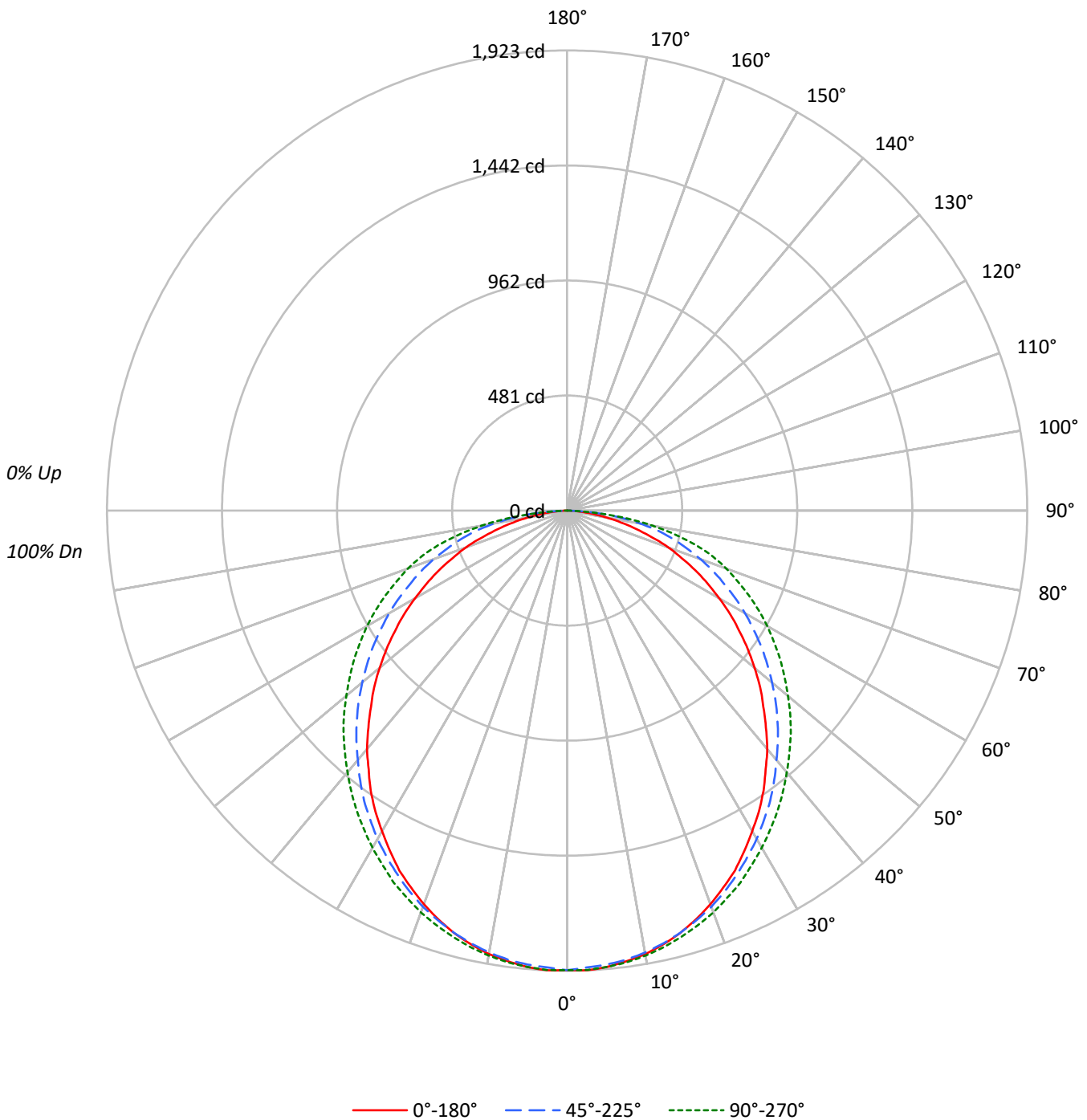
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	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	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2584	2584	2584
5°	2585	2572	2585
10°	2571	2563	2580
15°	2545	2544	2569
20°	2507	2522	2558
25°	2463	2491	2546
30°	2403	2462	2528
35°	2349	2430	2517
40°	2285	2391	2507
45°	2207	2366	2515
50°	2141	2340	2522
55°	2062	2323	2551
60°	1976	2312	2597
65°	1884	2304	2664
70°	1773	2328	2787
75°	1559	2376	2899
80°	1301	2393	2796
85°	929	2052	2079



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.3
10°-20°	517.1	9.3
20°-30°	775.8	14.0
30°-40°	926.2	16.7
40°-50°	959.4	17.3
50°-60°	883.2	15.9
60°-70°	712.4	12.8
70°-80°	465.5	8.4
80°-90°	136.5	2.5
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°	1474.4	26.5
0°-40°	2400.6	43.2
0°-60°	4243.2	76.3
0°-90°	5557.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5557.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1914	1912	1904	1915	1914	182
15°	1827	1827	1826	1844	1844	515
25°	1659	1663	1678	1709	1715	763
35°	1430	1443	1480	1520	1533	893
45°	1160	1189	1244	1299	1322	897
55°	879	917	990	1063	1087	787
65°	592	632	724	806	837	585
75°	300	356	457	536	558	320
85°	60	104	133	141	135	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1920.5	1920.5	1920.5	1920.5	1920.5
2.5°	1923.2	1920.5	1910.6	1922.3	1921.4
5°	1914.2	1912.4	1904.3	1915.1	1914.2
7.5°	1899.8	1898.9	1892.6	1904.3	1904.3
10°	1881.9	1880.1	1875.6	1889.1	1888.2
12.5°	1856.7	1855.8	1853.1	1869.3	1868.4
15°	1827.1	1827.1	1826.2	1844.2	1844.2
17.5°	1791.2	1792.1	1795.7	1816.3	1817.2
20°	1750.8	1754.4	1761.6	1784.9	1786.7
22.5°	1705.0	1712.2	1722.1	1748.1	1750.8
25°	1659.2	1662.8	1678.1	1708.6	1714.9
27.5°	1603.5	1612.5	1632.3	1663.7	1670.0
30°	1547.0	1559.5	1584.7	1617.0	1626.9
32.5°	1491.3	1502.1	1531.7	1568.5	1580.2
35°	1430.3	1442.8	1479.6	1520.0	1532.6
37.5°	1362.9	1382.7	1421.3	1468.0	1481.4
40°	1301.0	1318.9	1361.1	1413.2	1427.6
42.5°	1230.0	1252.5	1303.7	1356.6	1374.6
45°	1160.0	1188.7	1243.5	1299.2	1321.6
47.5°	1094.5	1117.8	1182.5	1245.3	1265.1
50°	1022.6	1049.6	1117.8	1184.3	1204.9
52.5°	951.7	984.0	1053.2	1123.2	1145.6
55°	879.0	916.7	990.3	1063.0	1087.3
57.5°	809.0	846.7	923.0	1000.2	1025.3
60°	734.4	774.8	859.2	933.8	965.2
62.5°	662.6	703.0	791.9	872.7	902.3
65°	591.7	632.1	723.7	806.3	836.8
67.5°	518.1	562.0	659.9	739.8	769.4
70°	450.7	492.9	591.7	677.0	708.4
72.5°	373.5	423.8	524.3	608.7	638.4
75°	299.9	356.4	457.0	536.0	557.6
77.5°	231.6	288.2	388.8	448.0	461.5
80°	167.9	225.4	308.9	350.2	360.9
82.5°	108.6	167.9	223.6	251.4	255.0
85°	60.2	104.1	132.9	141.0	134.7
87.5°	21.5	39.5	38.6	31.4	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)