

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: P474327

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L850-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474327
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-70HE-RDP-UNV-L850-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4928.0 lumens
Efficiency: N/A
Efficacy: 100.0 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

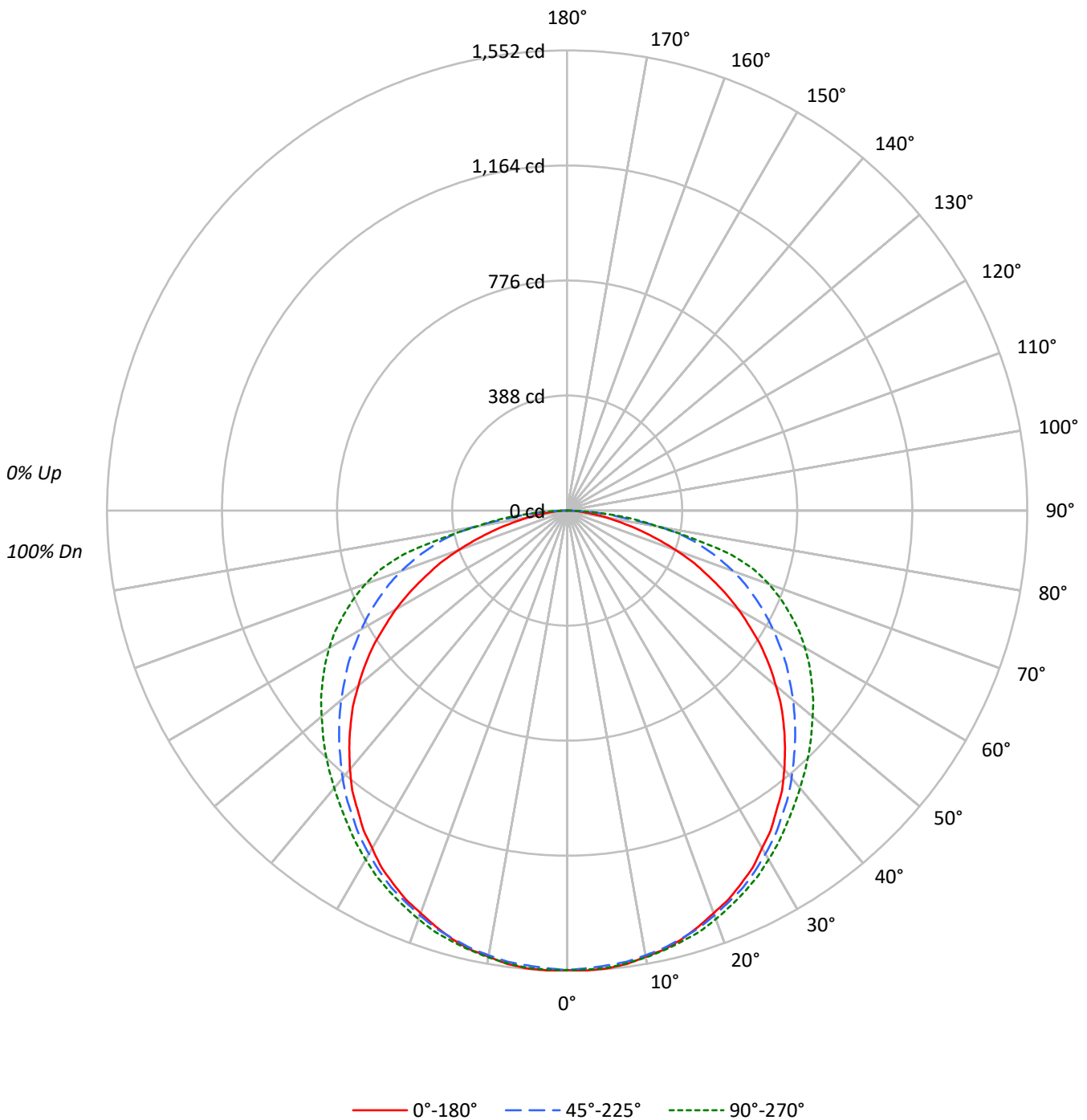
Input Watts (W): 49.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2085	2085	2085
5°	2093	2080	2090
10°	2087	2081	2091
15°	2084	2080	2094
20°	2068	2079	2100
25°	2061	2083	2105
30°	2043	2077	2111
35°	2023	2072	2120
40°	2001	2069	2147
45°	1968	2070	2195
50°	1924	2083	2262
55°	1875	2116	2362
60°	1796	2157	2493
65°	1681	2233	2646
70°	1529	2337	2846
75°	1295	2465	2974
80°	1024	2480	2405
85°	755	1888	2115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	3.0
10°-20°	423.1	8.6
20°-30°	647.0	13.1
30°-40°	790.9	16.0
40°-50°	843.0	17.1
50°-60°	806.0	16.4
60°-70°	682.7	13.9
70°-80°	458.9	9.3
80°-90°	129.5	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°	1217.1	24.7
0°-40°	2008.0	40.7
0°-60°	3656.9	74.2
0°-90°	4928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1550	1550	1550	1550	1550	
5°	1550	1547	1540	1547	1547	147
15°	1496	1496	1494	1506	1503	422
25°	1388	1393	1403	1415	1418	640
35°	1232	1242	1261	1286	1291	772
45°	1034	1051	1088	1134	1154	798
55°	799	829	902	973	1007	712
65°	528	582	701	794	831	524
75°	249	340	474	555	572	267
85°	49	100	122	132	137	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1549.8	1549.8	1549.8	1549.8	1549.8
2.5°	1552.2	1552.2	1544.9	1549.8	1549.8
5°	1549.8	1547.4	1540.0	1547.4	1547.4
7.5°	1542.5	1540.0	1535.1	1542.5	1540.0
10°	1527.8	1527.8	1522.9	1530.2	1530.2
12.5°	1515.6	1513.1	1510.7	1520.4	1518.0
15°	1496.0	1496.0	1493.5	1505.8	1503.3
17.5°	1471.5	1474.0	1476.4	1486.2	1488.7
20°	1444.6	1449.5	1452.0	1466.6	1466.6
22.5°	1420.2	1422.6	1427.5	1442.2	1442.2
25°	1388.4	1393.3	1403.1	1415.3	1417.7
27.5°	1356.6	1359.0	1371.3	1388.4	1390.8
30°	1315.0	1322.4	1337.0	1356.6	1359.0
32.5°	1278.3	1285.7	1302.8	1322.4	1327.2
35°	1231.9	1241.6	1261.2	1285.7	1290.6
37.5°	1190.3	1197.6	1222.1	1249.0	1256.3
40°	1139.2	1153.6	1178.1	1209.9	1222.1
42.5°	1087.8	1102.5	1131.8	1173.2	1187.8
45°	1034.0	1051.1	1087.8	1134.3	1153.6
47.5°	980.2	999.8	1041.3	1095.2	1117.2
50°	919.1	943.5	994.9	1056.0	1080.5
52.5°	860.4	889.7	946.0	1014.4	1046.2
55°	799.2	828.6	901.9	972.9	1007.1
57.5°	730.8	769.9	850.6	931.3	968.0
60°	667.4	703.9	801.7	889.7	926.4
62.5°	598.9	647.8	752.8	845.7	882.4
65°	528.0	581.8	701.4	794.3	831.0
67.5°	464.4	523.1	650.3	743.0	779.7
70°	388.6	462.0	594.0	686.7	723.4
72.5°	317.7	398.4	535.3	625.8	660.1
75°	249.2	339.7	474.2	554.9	572.0
77.5°	185.9	281.0	410.6	444.9	432.6
80°	132.1	225.0	320.1	303.0	310.4
82.5°	85.6	171.2	198.1	225.0	232.1
85°	48.9	100.3	122.3	132.1	137.0
87.5°	22.0	36.7	48.9	48.9	46.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)