

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: P474174

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474174
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3699.6 lumens
Efficiency: N/A
Efficacy: 85.0 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

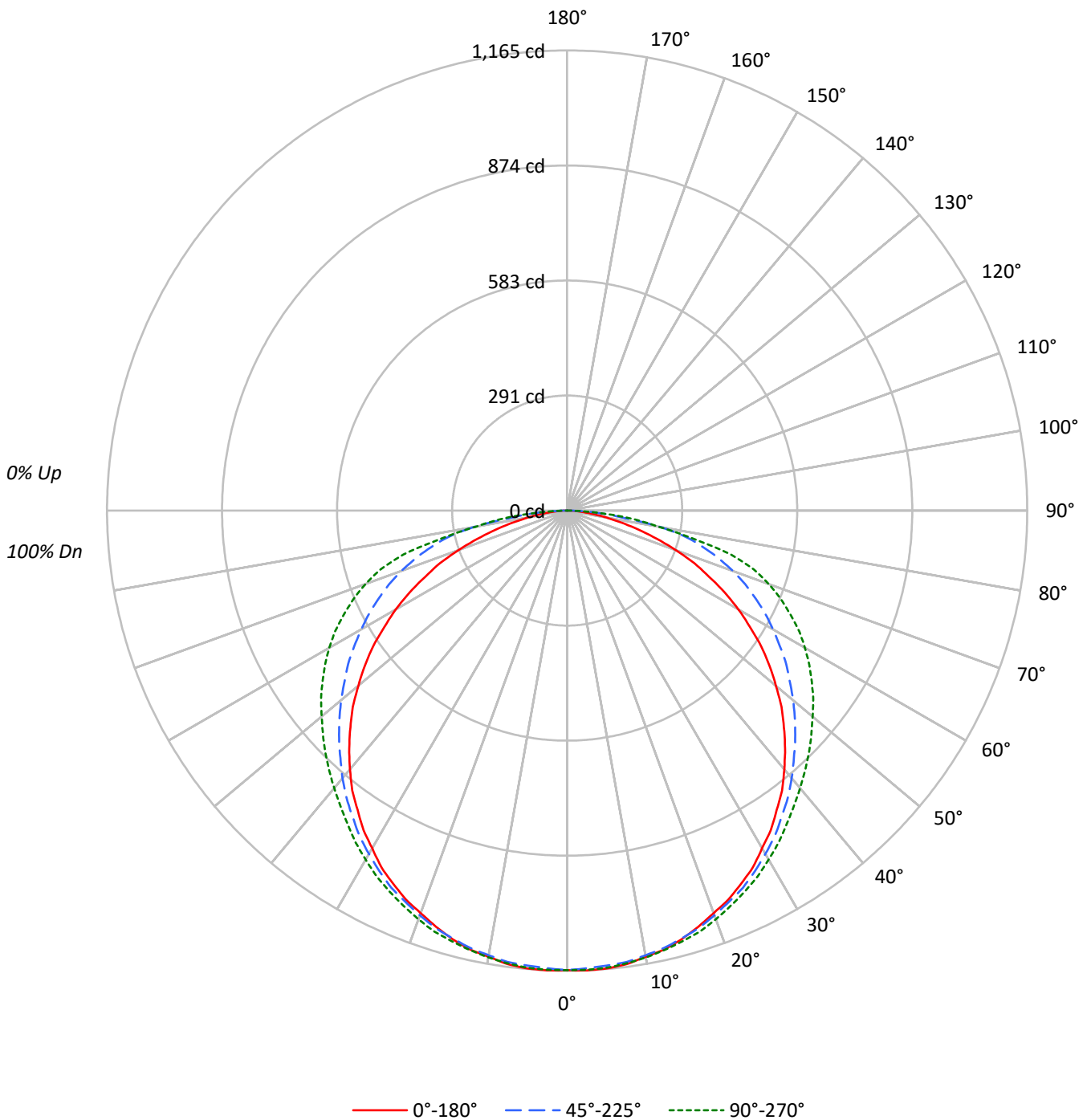
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1565	1565	1565
5°	1571	1561	1569
10°	1567	1562	1570
15°	1564	1562	1572
20°	1553	1561	1577
25°	1547	1564	1580
30°	1534	1559	1585
35°	1519	1555	1591
40°	1502	1553	1612
45°	1477	1554	1648
50°	1444	1563	1698
55°	1407	1588	1774
60°	1348	1619	1872
65°	1262	1677	1986
70°	1148	1755	2137
75°	973	1851	2232
80°	768	1862	1805
85°	567	1417	1587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	3.0
10°-20°	317.6	8.6
20°-30°	485.7	13.1
30°-40°	593.7	16.0
40°-50°	632.9	17.1
50°-60°	605.1	16.4
60°-70°	512.6	13.9
70°-80°	344.5	9.3
80°-90°	97.2	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°	913.7	24.7
0°-40°	1507.4	40.7
0°-60°	2745.4	74.2
0°-90°	3699.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3699.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1164	1162	1156	1162	1162	111
15°	1123	1123	1121	1130	1129	317
25°	1042	1046	1053	1062	1064	480
35°	925	932	947	965	969	579
45°	776	789	817	852	866	599
55°	600	622	677	730	756	534
65°	396	437	527	596	624	394
75°	187	255	356	417	429	200
85°	37	75	92	99	103	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1163.5	1163.5	1163.5	1163.5	1163.5
2.5°	1165.3	1165.3	1159.8	1163.5	1163.5
5°	1163.5	1161.6	1156.1	1161.6	1161.6
7.5°	1158.0	1156.1	1152.5	1158.0	1156.1
10°	1147.0	1147.0	1143.3	1148.8	1148.8
12.5°	1137.8	1135.9	1134.1	1141.4	1139.6
15°	1123.1	1123.1	1121.3	1130.4	1128.6
17.5°	1104.7	1106.6	1108.4	1115.7	1117.6
20°	1084.5	1088.2	1090.0	1101.1	1101.1
22.5°	1066.2	1068.0	1071.7	1082.7	1082.7
25°	1042.3	1046.0	1053.3	1062.5	1064.3
27.5°	1018.4	1020.3	1029.5	1042.3	1044.1
30°	987.2	992.7	1003.7	1018.4	1020.3
32.5°	959.7	965.2	978.0	992.7	996.4
35°	924.8	932.1	946.8	965.2	968.9
37.5°	893.6	899.1	917.5	937.7	943.2
40°	855.2	866.0	884.4	908.3	917.5
42.5°	816.7	827.7	849.7	880.7	891.7
45°	776.3	789.1	816.7	851.5	866.0
47.5°	735.9	750.6	781.8	822.2	838.7
50°	690.0	708.3	746.9	792.8	811.1
52.5°	645.9	667.9	710.2	761.6	785.4
55°	600.0	622.0	677.1	730.4	756.1
57.5°	548.6	578.0	638.6	699.2	726.7
60°	501.0	528.4	601.8	667.9	695.5
62.5°	449.6	486.4	565.1	634.9	662.4
65°	396.4	436.8	526.6	596.3	623.9
67.5°	348.7	392.7	488.2	557.8	585.3
70°	291.7	346.8	446.0	515.6	543.1
72.5°	238.5	299.1	401.9	469.8	495.5
75°	187.1	255.0	356.0	416.6	429.4
77.5°	139.5	211.0	308.3	334.0	324.8
80°	99.1	168.9	240.3	227.5	233.0
82.5°	64.3	128.5	148.7	168.9	174.2
85°	36.7	75.3	91.8	99.1	102.8
87.5°	16.5	27.5	36.7	36.7	34.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)