

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: P474894

Luminaire Tested: **22CZ2-55VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474894  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-S-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5477.9 lumens  
Efficiency: N/A  
Efficacy: 142.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

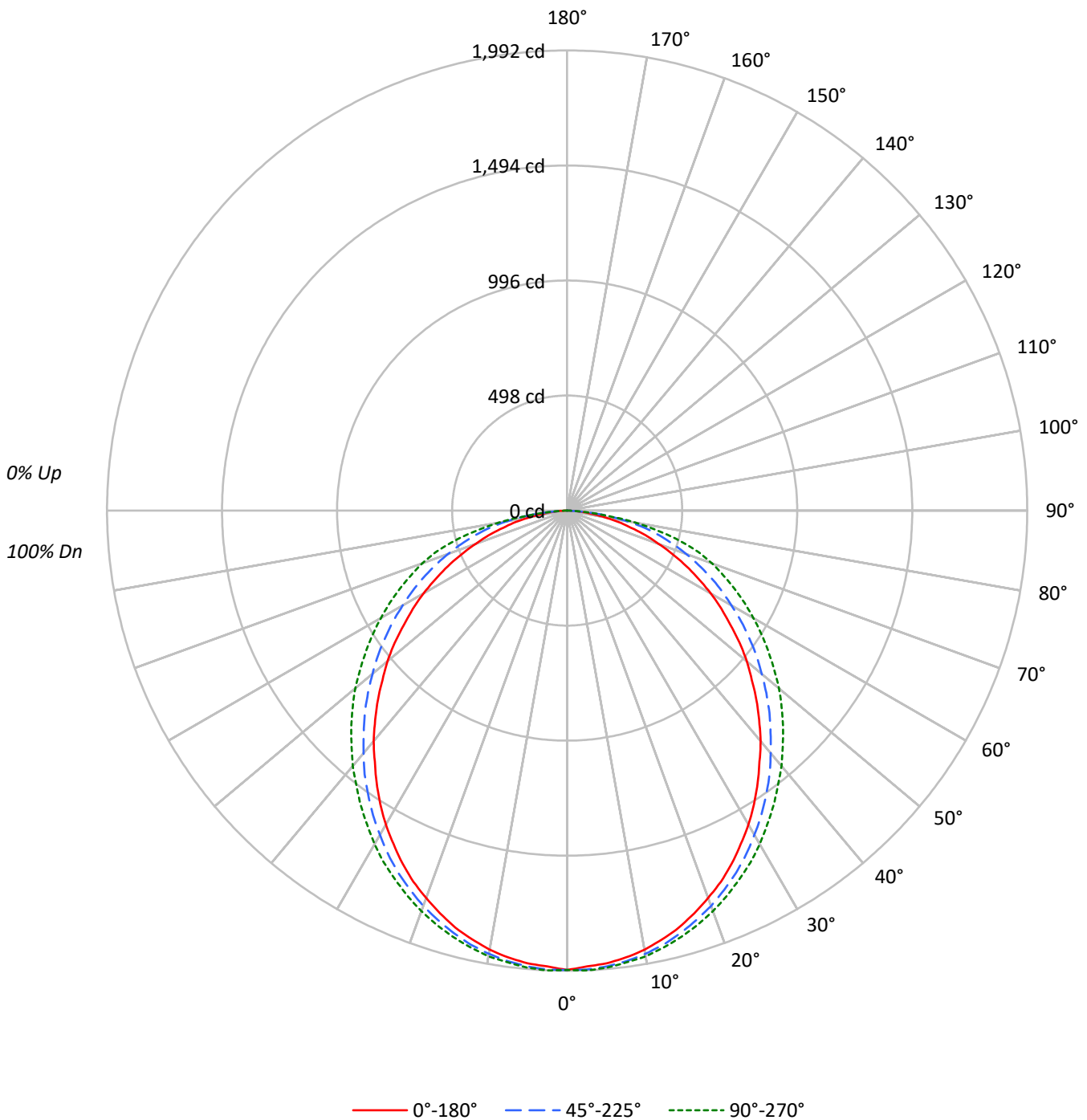
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5351	5351	5351
5°	5314	5350	5364
10°	5274	5325	5354
15°	5207	5278	5322
20°	5110	5216	5284
25°	5007	5137	5231
30°	4877	5038	5182
35°	4725	4934	5117
40°	4578	4815	5071
45°	4409	4712	5030
50°	4251	4606	5012
55°	4049	4515	4988
60°	3867	4423	5008
65°	3629	4372	5081
70°	3317	4318	5246
75°	2977	4287	5252
80°	2506	4048	4663
85°	1883	2742	2538



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.8	3.4
10°-20°	533.4	9.7
20°-30°	795.3	14.5
30°-40°	938.4	17.1
40°-50°	956.0	17.5
50°-60°	862.2	15.7
60°-70°	677.1	12.4
70°-80°	423.3	7.7
80°-90°	104.4	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°	1516.5	27.7
0°-40°	2454.8	44.8
0°-60°	4273.1	78.0
0°-90°	5477.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5477.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1988	1988	1988	1988	1988	
5°	1967	1971	1980	1984	1986	187
15°	1869	1876	1894	1908	1910	526
25°	1686	1696	1730	1755	1762	776
35°	1438	1458	1502	1543	1558	900
45°	1159	1178	1238	1298	1322	894
55°	863	891	962	1037	1063	774
65°	570	600	687	764	798	563
75°	286	326	412	482	505	306
85°	61	78	89	88	82	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1988.5	1988.5	1988.5	1988.5	1988.5
2.5°	1975.2	1979.2	1988.5	1992.5	1992.5
5°	1967.3	1971.3	1980.5	1984.5	1985.8
7.5°	1951.4	1956.7	1967.3	1972.6	1972.6
10°	1930.2	1936.8	1948.7	1956.7	1959.3
12.5°	1901.0	1909.0	1924.9	1934.1	1936.8
15°	1869.2	1875.8	1894.4	1907.6	1910.3
17.5°	1828.1	1838.7	1858.6	1875.8	1879.8
20°	1784.3	1796.3	1821.5	1841.3	1845.3
22.5°	1739.3	1748.5	1776.4	1800.2	1805.5
25°	1686.2	1695.5	1730.0	1755.2	1761.8
27.5°	1627.9	1643.8	1678.3	1707.5	1718.1
30°	1569.6	1585.5	1621.3	1655.8	1667.7
32.5°	1506.0	1523.2	1564.3	1600.1	1612.0
35°	1438.3	1458.2	1502.0	1543.1	1557.7
37.5°	1368.1	1390.6	1439.7	1483.4	1499.3
40°	1303.1	1319.0	1370.7	1421.1	1443.6
42.5°	1230.2	1251.4	1303.1	1360.1	1381.3
45°	1158.6	1178.5	1238.2	1297.8	1321.7
47.5°	1084.4	1109.6	1169.2	1235.5	1259.4
50°	1015.5	1036.7	1100.3	1170.6	1197.1
52.5°	941.2	963.8	1032.7	1105.6	1129.5
55°	863.0	890.8	962.4	1036.7	1063.2
57.5°	791.4	817.9	893.5	970.4	998.2
60°	718.5	745.0	821.9	900.1	930.6
62.5°	641.6	672.1	755.6	831.2	865.7
65°	570.0	600.5	686.7	763.6	798.0
67.5°	494.5	530.3	616.4	697.3	731.8
70°	421.6	464.0	548.8	628.4	666.8
72.5°	356.6	391.1	479.9	563.4	595.2
75°	286.3	326.1	412.3	482.5	505.1
77.5°	226.7	261.2	343.3	389.7	404.3
80°	161.7	200.2	261.2	289.0	300.9
82.5°	107.4	139.2	177.6	182.9	180.3
85°	61.0	78.2	88.8	87.5	82.2
87.5°	23.9	26.5	19.9	11.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)