

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: P474778

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474778  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5370.0 lumens  
Efficiency: N/A  
Efficacy: 139.5 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

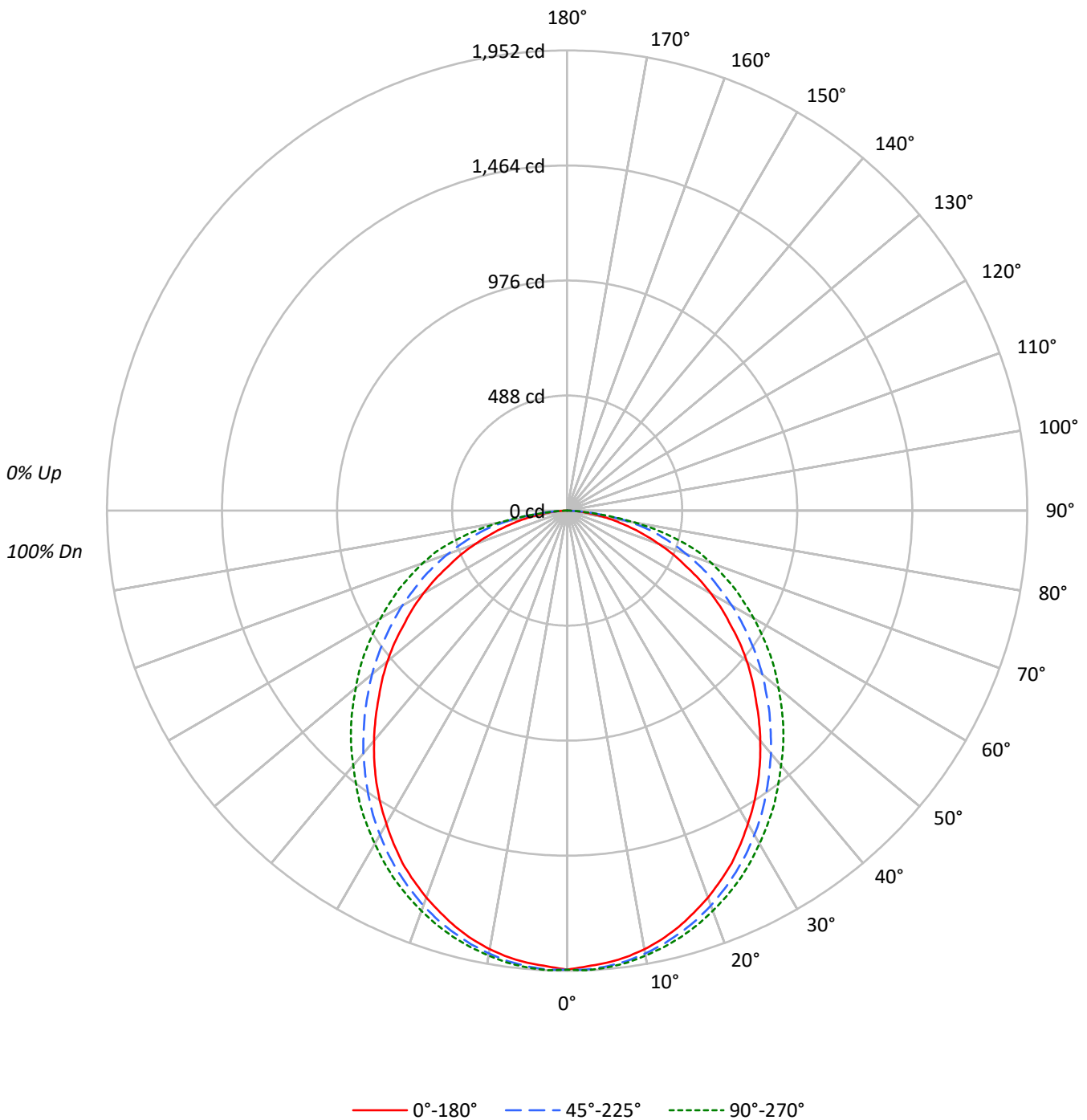
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83				83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69				69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58				58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50				50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43				43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38				38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33				33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30				30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27				27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24				24

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

	0°	45°	90°
0°	5240	5240	5240
5°	5202	5242	5254
10°	5163	5213	5238
15°	5093	5166	5214
20°	5002	5106	5174
25°	4903	5027	5132
30°	4767	4937	5071
35°	4634	4832	5022
40°	4477	4724	4959
45°	4306	4617	4937
50°	4167	4523	4899
55°	3972	4425	4909
60°	3793	4349	4923
65°	3526	4292	5000
70°	3259	4232	5125
75°	2914	4213	5156
80°	2444	3992	4502
85°	1893	2732	2556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.0	3.4
10°-20°	522.3	9.7
20°-30°	778.8	14.5
30°-40°	919.3	17.1
40°-50°	937.0	17.4
50°-60°	845.0	15.7
60°-70°	664.1	12.4
70°-80°	415.8	7.7
80°-90°	103.7	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°	1485.1	27.7
0°-40°	2404.4	44.8
0°-60°	4186.4	78.0
0°-90°	5370.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5370.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1947	1947	1947	1947	1947	
5°	1926	1930	1941	1945	1945	183
15°	1828	1836	1854	1868	1871	515
25°	1651	1664	1693	1719	1728	759
35°	1411	1429	1471	1512	1529	881
45°	1132	1156	1213	1272	1297	875
55°	847	873	943	1016	1046	760
65°	554	588	674	749	785	552
75°	280	322	405	478	496	298
85°	61	78	88	88	83	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1947.4	1947.4	1947.4	1947.4	1947.4
2.5°	1935.0	1939.5	1948.6	1952.0	1952.0
5°	1925.9	1930.4	1940.6	1945.2	1945.2
7.5°	1911.1	1915.7	1928.2	1933.8	1935.0
10°	1889.6	1895.2	1907.7	1916.8	1916.8
12.5°	1862.3	1868.0	1883.9	1895.2	1896.4
15°	1828.3	1836.2	1854.4	1868.0	1871.4
17.5°	1788.6	1801.0	1821.5	1838.5	1841.9
20°	1746.6	1759.1	1782.9	1802.2	1806.7
22.5°	1700.0	1711.4	1739.8	1763.6	1769.3
25°	1651.2	1663.7	1693.2	1719.3	1728.4
27.5°	1593.4	1608.1	1643.3	1672.8	1681.9
30°	1534.3	1552.5	1588.8	1621.7	1631.9
32.5°	1474.2	1491.2	1532.1	1567.3	1580.9
35°	1410.6	1428.8	1470.8	1511.7	1528.7
37.5°	1343.7	1361.8	1407.2	1453.8	1469.7
40°	1274.5	1296.0	1344.8	1394.8	1411.8
42.5°	1204.1	1226.8	1277.9	1333.5	1356.2
45°	1131.5	1156.4	1213.2	1272.2	1297.2
47.5°	1065.6	1086.1	1145.1	1209.8	1233.6
50°	995.3	1014.6	1080.4	1145.1	1170.1
52.5°	923.8	941.9	1012.3	1080.4	1111.0
55°	846.6	872.7	943.1	1015.7	1046.4
57.5°	778.5	802.4	875.0	948.8	978.3
60°	704.8	729.7	808.0	882.9	914.7
62.5°	631.0	658.2	737.7	818.2	847.8
65°	553.8	587.9	674.1	749.0	785.3
67.5°	488.0	520.9	606.0	684.3	716.1
70°	414.2	452.8	537.9	617.4	651.4
72.5°	345.0	383.6	471.0	550.4	584.5
75°	280.3	322.3	405.2	477.8	495.9
77.5°	217.9	257.6	340.5	382.5	401.7
80°	157.7	196.3	257.6	286.0	290.5
82.5°	106.7	139.6	174.8	182.7	178.2
85°	61.3	78.3	88.5	88.5	82.8
87.5°	25.0	25.0	21.6	13.6	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)