

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: P474923

Luminaire Tested: **22CZ2-55VHE-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474923  
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-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5676.6 lumens  
Efficiency: N/A  
Efficacy: 147.4 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

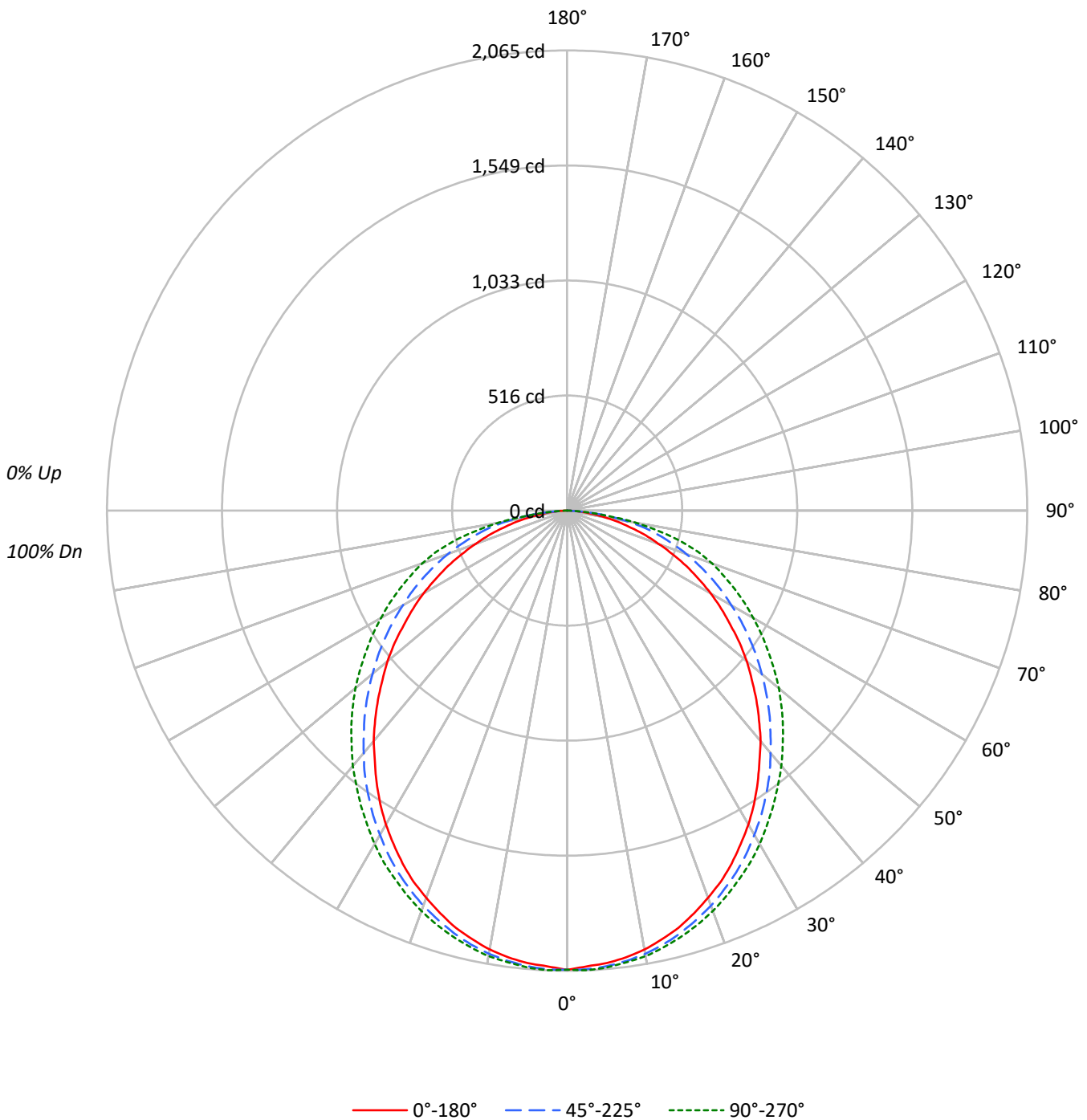
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5545	5545	5545
5°	5507	5544	5559
10°	5466	5518	5548
15°	5396	5469	5515
20°	5295	5405	5476
25°	5188	5323	5421
30°	5054	5221	5370
35°	4896	5113	5302
40°	4744	4990	5255
45°	4569	4883	5212
50°	4405	4773	5193
55°	4196	4679	5169
60°	4007	4584	5190
65°	3761	4531	5266
70°	3437	4474	5437
75°	3085	4442	5442
80°	2597	4193	4832
85°	1951	2841	2631



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.6	3.4
10°-20°	552.7	9.7
20°-30°	824.1	14.5
30°-40°	972.4	17.1
40°-50°	990.7	17.5
50°-60°	893.5	15.7
60°-70°	701.7	12.4
70°-80°	438.7	7.7
80°-90°	108.1	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°	1571.5	27.7
0°-40°	2543.9	44.8
0°-60°	4428.1	78.0
0°-90°	5676.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5676.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2061	2061	2061	2061	2061	
5°	2039	2043	2052	2056	2058	193
15°	1937	1944	1963	1977	1980	545
25°	1747	1757	1793	1819	1826	804
35°	1490	1511	1556	1599	1614	932
45°	1201	1221	1283	1345	1370	926
55°	894	923	997	1074	1102	802
65°	591	622	712	791	827	583
75°	297	338	427	500	523	317
85°	63	81	92	91	85	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2060.6	2060.6	2060.6	2060.6	2060.6
2.5°	2046.9	2051.0	2060.6	2064.7	2064.7
5°	2038.6	2042.8	2052.4	2056.5	2057.9
7.5°	2022.1	2027.6	2038.6	2044.1	2044.1
10°	2000.2	2007.0	2019.4	2027.6	2030.4
12.5°	1969.9	1978.2	1994.7	2004.3	2007.0
15°	1937.0	1943.8	1963.1	1976.8	1979.6
17.5°	1894.4	1905.4	1926.0	1943.8	1948.0
20°	1849.1	1861.4	1887.5	1908.1	1912.2
22.5°	1802.3	1812.0	1840.8	1865.5	1871.0
25°	1747.4	1757.0	1792.7	1818.8	1825.7
27.5°	1687.0	1703.4	1739.2	1769.4	1780.4
30°	1626.5	1643.0	1680.1	1715.8	1728.2
32.5°	1560.6	1578.4	1621.0	1658.1	1670.5
35°	1490.5	1511.1	1556.4	1599.0	1614.1
37.5°	1417.7	1441.1	1491.9	1537.2	1553.7
40°	1350.4	1366.9	1420.4	1472.7	1496.0
42.5°	1274.8	1296.8	1350.4	1409.5	1431.4
45°	1200.7	1221.3	1283.1	1344.9	1369.6
47.5°	1123.7	1149.8	1211.6	1280.3	1305.1
50°	1052.3	1074.3	1140.2	1213.0	1240.5
52.5°	975.4	998.7	1070.1	1145.7	1170.4
55°	894.3	923.2	997.3	1074.3	1101.7
57.5°	820.1	847.6	925.9	1005.6	1034.4
60°	744.6	772.0	851.7	932.8	964.4
62.5°	664.9	696.5	783.0	861.3	897.1
65°	590.7	622.3	711.6	791.3	827.0
67.5°	512.4	549.5	638.8	722.6	758.3
70°	436.8	480.8	568.7	651.2	691.0
72.5°	369.5	405.3	497.3	583.8	616.8
75°	296.7	337.9	427.2	500.0	523.4
77.5°	234.9	270.6	355.8	403.9	419.0
80°	167.6	207.4	270.6	299.5	311.8
82.5°	111.3	144.2	184.1	189.6	186.8
85°	63.2	81.1	92.0	90.7	85.2
87.5°	24.7	27.5	20.6	12.4	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)