

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: P474981

Luminaire Tested: **22CZ2-55VHE-S-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474981  
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-L850-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5784.5 lumens  
Efficiency: N/A  
Efficacy: 150.2 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

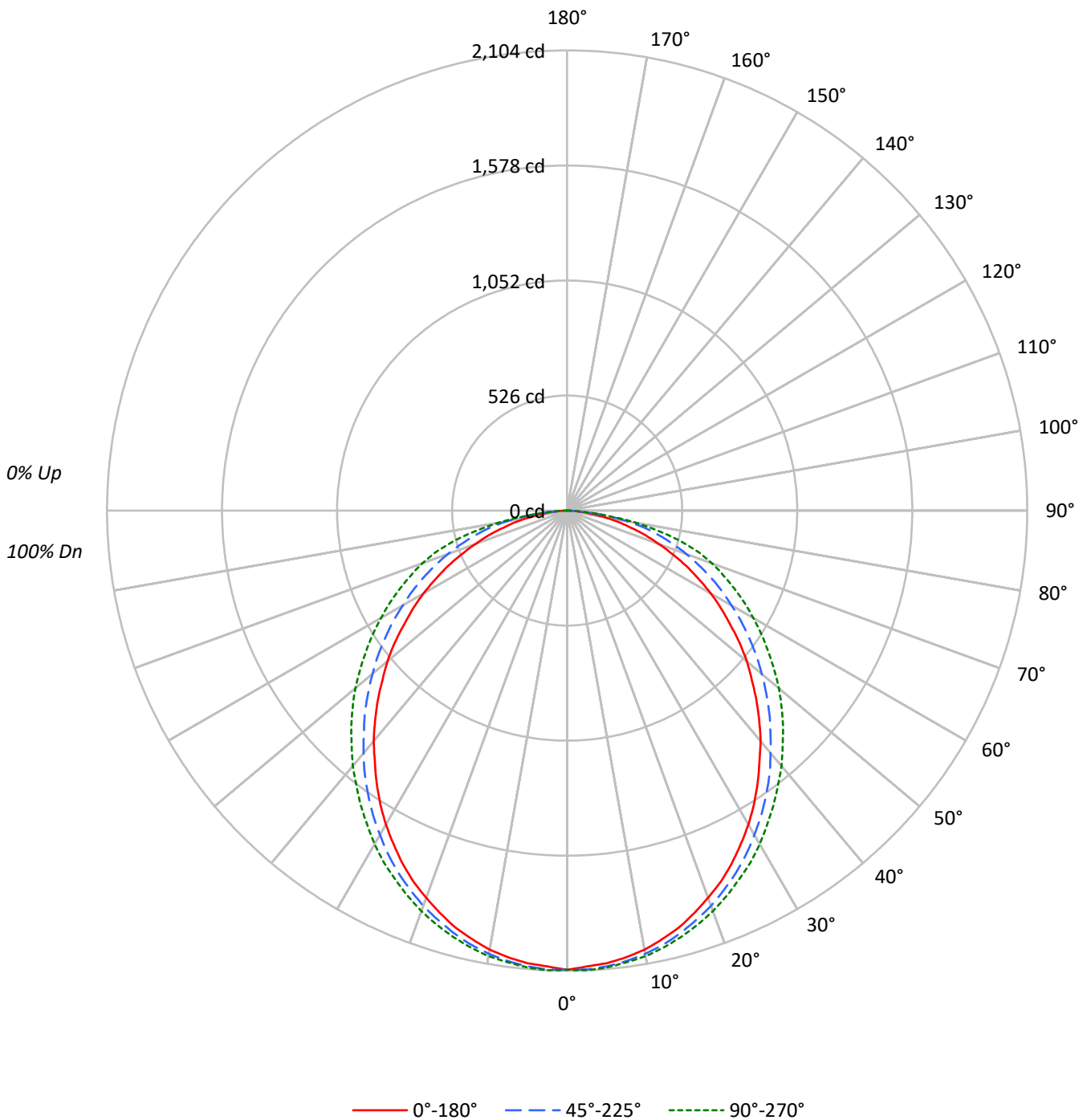
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	85	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°	5651	5651	5651
5°	5612	5649	5665
10°	5569	5623	5654
15°	5499	5573	5620
20°	5396	5508	5580
25°	5287	5424	5524
30°	5150	5320	5472
35°	4989	5210	5403
40°	4834	5084	5355
45°	4656	4976	5311
50°	4489	4864	5292
55°	4275	4768	5267
60°	4083	4671	5289
65°	3833	4617	5366
70°	3502	4559	5540
75°	3144	4527	5545
80°	2647	4274	4925
85°	1988	2896	2680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.3	3.4
10°-20°	563.2	9.7
20°-30°	839.8	14.5
30°-40°	990.9	17.1
40°-50°	1009.6	17.5
50°-60°	910.5	15.7
60°-70°	715.0	12.4
70°-80°	447.0	7.7
80°-90°	110.2	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°	1601.3	27.7
0°-40°	2592.2	44.8
0°-60°	4512.2	78.0
0°-90°	5784.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5784.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2100	2100	2100	2100	2100	
5°	2077	2082	2091	2096	2097	197
15°	1974	1981	2000	2014	2017	556
25°	1781	1790	1827	1853	1860	819
35°	1519	1540	1586	1629	1645	950
45°	1224	1244	1308	1370	1396	944
55°	911	941	1016	1095	1123	817
65°	602	634	725	806	843	594
75°	302	344	435	510	533	323
85°	64	83	94	92	87	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2099.8	2099.8	2099.8	2099.8	2099.8
2.5°	2085.8	2090.0	2099.8	2104.0	2104.0
5°	2077.4	2081.6	2091.4	2095.6	2097.0
7.5°	2060.6	2066.2	2077.4	2083.0	2083.0
10°	2038.2	2045.2	2057.8	2066.2	2069.0
12.5°	2007.4	2015.8	2032.6	2042.4	2045.2
15°	1973.8	1980.8	2000.4	2014.4	2017.2
17.5°	1930.4	1941.6	1962.6	1980.8	1985.0
20°	1884.2	1896.8	1923.4	1944.4	1948.6
22.5°	1836.6	1846.4	1875.8	1901.0	1906.6
25°	1780.6	1790.4	1826.8	1853.4	1860.4
27.5°	1719.0	1735.8	1772.2	1803.0	1814.2
30°	1657.4	1674.2	1712.0	1748.4	1761.0
32.5°	1590.2	1608.4	1651.8	1689.6	1702.2
35°	1518.8	1539.8	1586.0	1629.4	1644.8
37.5°	1444.6	1468.4	1520.2	1566.4	1583.2
40°	1376.0	1392.8	1447.4	1500.6	1524.4
42.5°	1299.1	1321.5	1376.0	1436.2	1458.6
45°	1223.5	1244.5	1307.5	1370.4	1395.6
47.5°	1145.1	1171.7	1234.7	1304.7	1329.9
50°	1072.3	1094.7	1161.9	1236.1	1264.1
52.5°	993.9	1017.7	1090.5	1167.5	1192.7
55°	911.3	940.7	1016.3	1094.7	1122.7
57.5°	835.7	863.7	943.5	1024.7	1054.1
60°	758.7	786.7	867.9	950.5	982.7
62.5°	677.5	709.7	797.9	877.7	914.1
65°	601.9	634.1	725.1	806.3	842.7
67.5°	522.1	559.9	650.9	736.3	772.7
70°	445.1	489.9	579.5	663.5	704.1
72.5°	376.6	413.0	506.7	594.9	628.5
75°	302.4	344.4	435.4	509.5	533.3
77.5°	239.4	275.8	362.6	411.6	427.0
80°	170.8	211.4	275.8	305.2	317.8
82.5°	113.4	147.0	187.6	193.2	190.4
85°	64.4	82.6	93.8	92.4	86.8
87.5°	25.2	28.0	21.0	12.6	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)