

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: P474836

Luminaire Tested: **22CZ2-55VHE-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474836
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

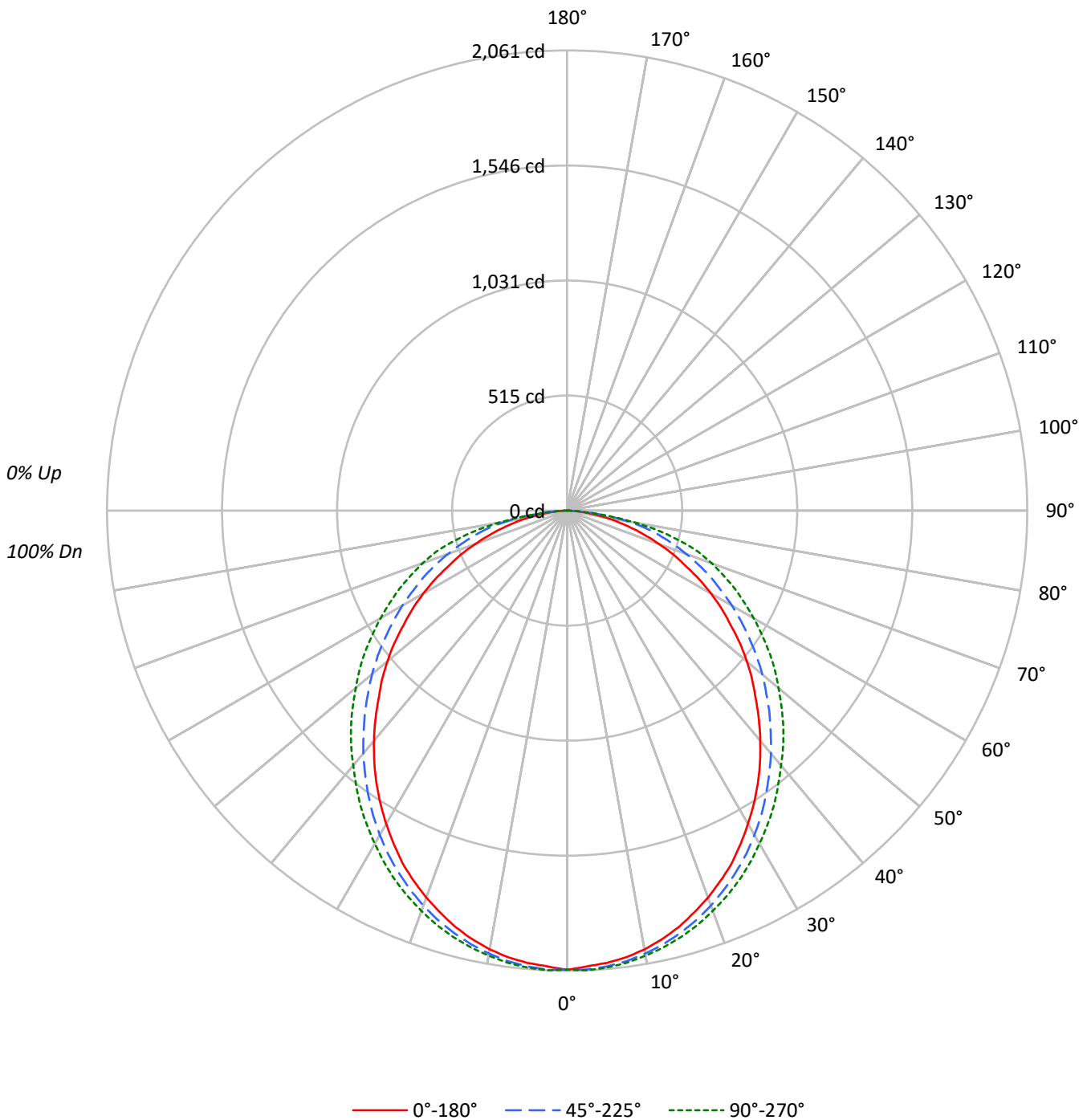
Lumens per Lamp: N/A
Luminaire Lumens: 5670.5 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	87	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	73	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	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5534	5534	5534
5°	5494	5535	5548
10°	5452	5505	5531
15°	5378	5455	5505
20°	5281	5391	5463
25°	5177	5309	5419
30°	5034	5213	5355
35°	4893	5102	5303
40°	4728	4989	5237
45°	4547	4875	5213
50°	4400	4776	5172
55°	4194	4672	5184
60°	4005	4592	5198
65°	3724	4532	5280
70°	3441	4469	5412
75°	3078	4448	5445
80°	2582	4215	4754
85°	1998	2887	2702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.3	3.4
10°-20°	551.5	9.7
20°-30°	822.4	14.5
30°-40°	970.8	17.1
40°-50°	989.4	17.4
50°-60°	892.3	15.7
60°-70°	701.3	12.4
70°-80°	439.1	7.7
80°-90°	109.5	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°	1568.2	27.7
0°-40°	2539.0	44.8
0°-60°	4420.7	78.0
0°-90°	5670.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5670.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2056	2056	2056	2056	2056	
5°	2034	2038	2049	2054	2054	193
15°	1931	1939	1958	1972	1976	544
25°	1744	1757	1788	1816	1825	802
35°	1490	1509	1553	1596	1614	931
45°	1195	1221	1281	1343	1370	924
55°	894	922	996	1073	1105	802
65°	585	621	712	791	829	583
75°	296	340	428	504	524	314
85°	65	83	94	94	88	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2056.4	2056.4	2056.4	2056.4	2056.4
2.5°	2043.2	2048.0	2057.6	2061.2	2061.2
5°	2033.7	2038.4	2049.2	2054.0	2054.0
7.5°	2018.1	2022.9	2036.0	2042.0	2043.2
10°	1995.3	2001.3	2014.5	2024.1	2024.1
12.5°	1966.5	1972.5	1989.3	2001.3	2002.5
15°	1930.6	1939.0	1958.2	1972.5	1976.1
17.5°	1888.6	1901.8	1923.4	1941.4	1945.0
20°	1844.3	1857.5	1882.7	1903.0	1907.8
22.5°	1795.2	1807.2	1837.1	1862.3	1868.3
25°	1743.6	1756.8	1788.0	1815.5	1825.1
27.5°	1682.5	1698.1	1735.3	1766.4	1776.0
30°	1620.2	1639.4	1677.7	1712.5	1723.3
32.5°	1556.7	1574.7	1617.8	1655.0	1669.3
35°	1489.6	1508.8	1553.1	1596.2	1614.2
37.5°	1418.9	1438.1	1486.0	1535.1	1551.9
40°	1345.8	1368.6	1420.1	1472.8	1490.8
42.5°	1271.5	1295.4	1349.4	1408.1	1432.1
45°	1194.8	1221.1	1281.1	1343.4	1369.7
47.5°	1125.3	1146.8	1209.2	1277.5	1302.6
50°	1051.0	1071.4	1140.9	1209.2	1235.5
52.5°	975.5	994.7	1069.0	1140.9	1173.2
55°	894.0	921.6	995.9	1072.6	1104.9
57.5°	822.1	847.3	924.0	1001.8	1033.0
60°	744.2	770.6	853.2	932.3	965.9
62.5°	666.3	695.1	778.9	864.0	895.2
65°	584.8	620.8	711.8	790.9	829.3
67.5°	515.3	550.1	639.9	722.6	756.2
70°	437.4	478.2	568.0	651.9	687.9
72.5°	364.3	405.1	497.3	581.2	617.2
75°	296.0	340.3	427.8	504.5	523.7
77.5°	230.1	272.0	359.5	403.9	424.2
80°	166.6	207.3	272.0	302.0	306.8
82.5°	112.6	147.4	184.6	192.9	188.1
85°	64.7	82.7	93.5	93.5	87.5
87.5°	26.4	26.4	22.8	14.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)