

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: P474766

Luminaire Tested: **22CZ2-20HE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474766  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-20HE-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1958.9 lumens  
Efficiency: N/A  
Efficacy: 130.6 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

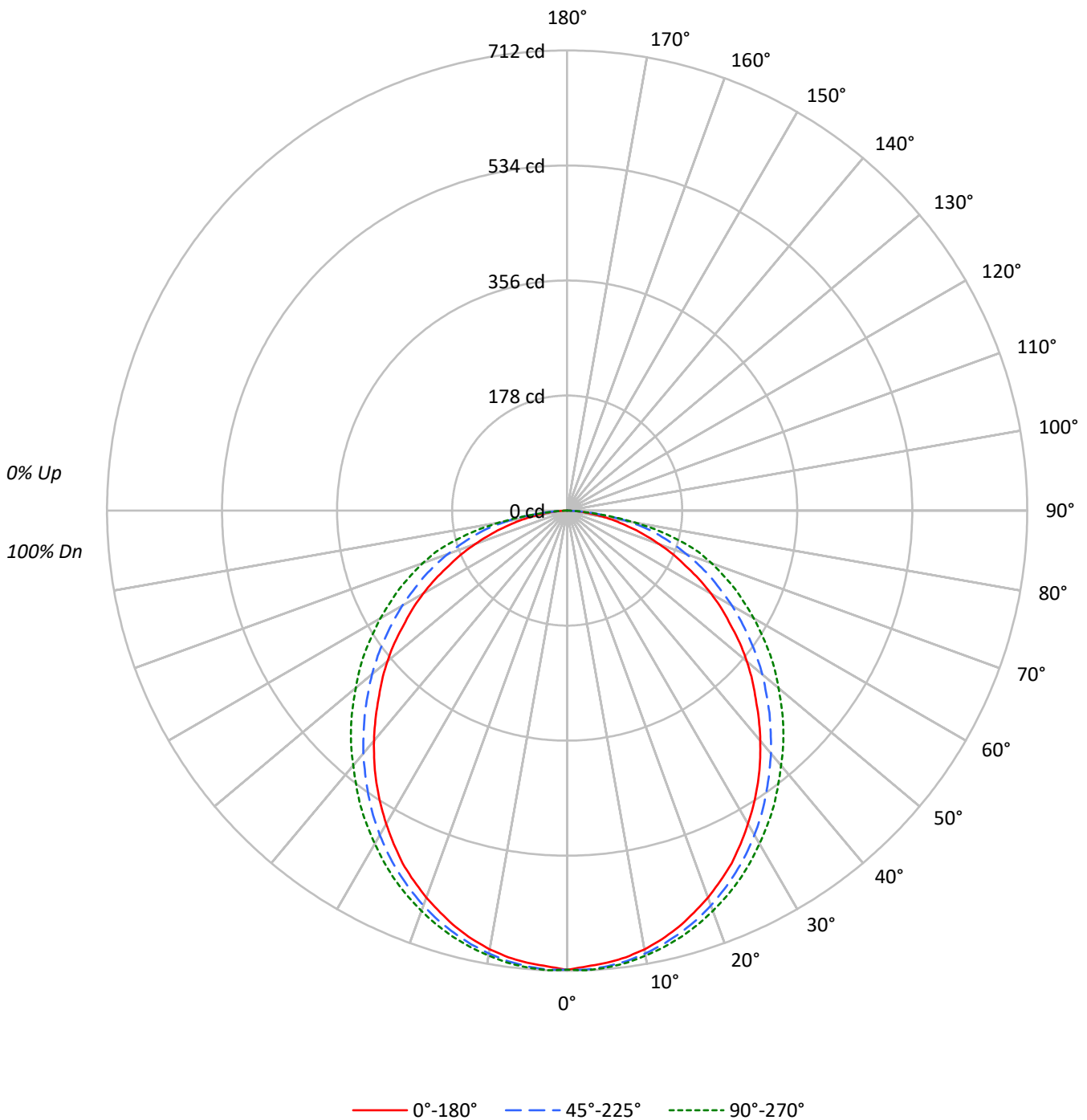
Input Watts (W): 15  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1912	1912	1912
5°	1898	1912	1917
10°	1884	1902	1911
15°	1858	1884	1902
20°	1824	1863	1887
25°	1788	1834	1872
30°	1739	1801	1850
35°	1691	1762	1832
40°	1633	1723	1809
45°	1571	1684	1801
50°	1520	1650	1787
55°	1449	1614	1791
60°	1384	1587	1796
65°	1286	1566	1824
70°	1189	1544	1869
75°	1064	1537	1881
80°	891	1457	1643
85°	692	997	932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	3.4
10°-20°	190.5	9.7
20°-30°	284.1	14.5
30°-40°	335.4	17.1
40°-50°	341.8	17.4
50°-60°	308.2	15.7
60°-70°	242.3	12.4
70°-80°	151.7	7.7
80°-90°	37.8	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°	541.7	27.7
0°-40°	877.1	44.8
0°-60°	1527.1	78.0
0°-90°	1958.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1958.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	702	704	708	710	710	67
15°	667	670	676	681	683	188
25°	602	607	618	627	630	277
35°	515	521	536	551	558	322
45°	413	422	442	464	473	319
55°	309	318	344	370	382	277
65°	202	214	246	273	286	201
75°	102	118	148	174	181	109
85°	22	29	32	32	30	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	710.4	710.4	710.4	710.4	710.4
2.5°	705.8	707.5	710.8	712.0	712.0
5°	702.5	704.2	707.9	709.6	709.6
7.5°	697.1	698.8	703.4	705.4	705.8
10°	689.3	691.3	695.9	699.2	699.2
12.5°	679.3	681.4	687.2	691.3	691.8
15°	666.9	669.8	676.4	681.4	682.7
17.5°	652.4	657.0	664.4	670.6	671.9
20°	637.1	641.7	650.4	657.4	659.1
22.5°	620.1	624.3	634.6	643.3	645.4
25°	602.3	606.9	617.7	627.2	630.5
27.5°	581.2	586.6	599.4	610.2	613.5
30°	559.7	566.3	579.6	591.6	595.3
32.5°	537.8	544.0	558.9	571.7	576.7
35°	514.6	521.2	536.5	551.4	557.6
37.5°	490.2	496.8	513.3	530.3	536.1
40°	464.9	472.8	490.6	508.8	515.0
42.5°	439.2	447.5	466.1	486.4	494.7
45°	412.7	421.8	442.5	464.1	473.2
47.5°	388.7	396.2	417.7	441.3	450.0
50°	363.1	370.1	394.1	417.7	426.8
52.5°	337.0	343.6	369.3	394.1	405.3
55°	308.8	318.4	344.0	370.5	381.7
57.5°	284.0	292.7	319.2	346.1	356.9
60°	257.1	266.2	294.8	322.1	333.7
62.5°	230.2	240.1	269.1	298.5	309.2
65°	202.0	214.4	245.9	273.2	286.5
67.5°	178.0	190.0	221.1	249.6	261.2
70°	151.1	165.2	196.2	225.2	237.6
72.5°	125.8	139.9	171.8	200.8	213.2
75°	102.3	117.6	147.8	174.3	180.9
77.5°	79.5	94.0	124.2	139.5	146.5
80°	57.5	71.6	94.0	104.3	106.0
82.5°	38.9	50.9	63.8	66.7	65.0
85°	22.4	28.6	32.3	32.3	30.2
87.5°	9.1	9.1	7.9	5.0	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)