

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: P271972

Luminaire Tested: **22CZ2-20-UNV-L950-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P271972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

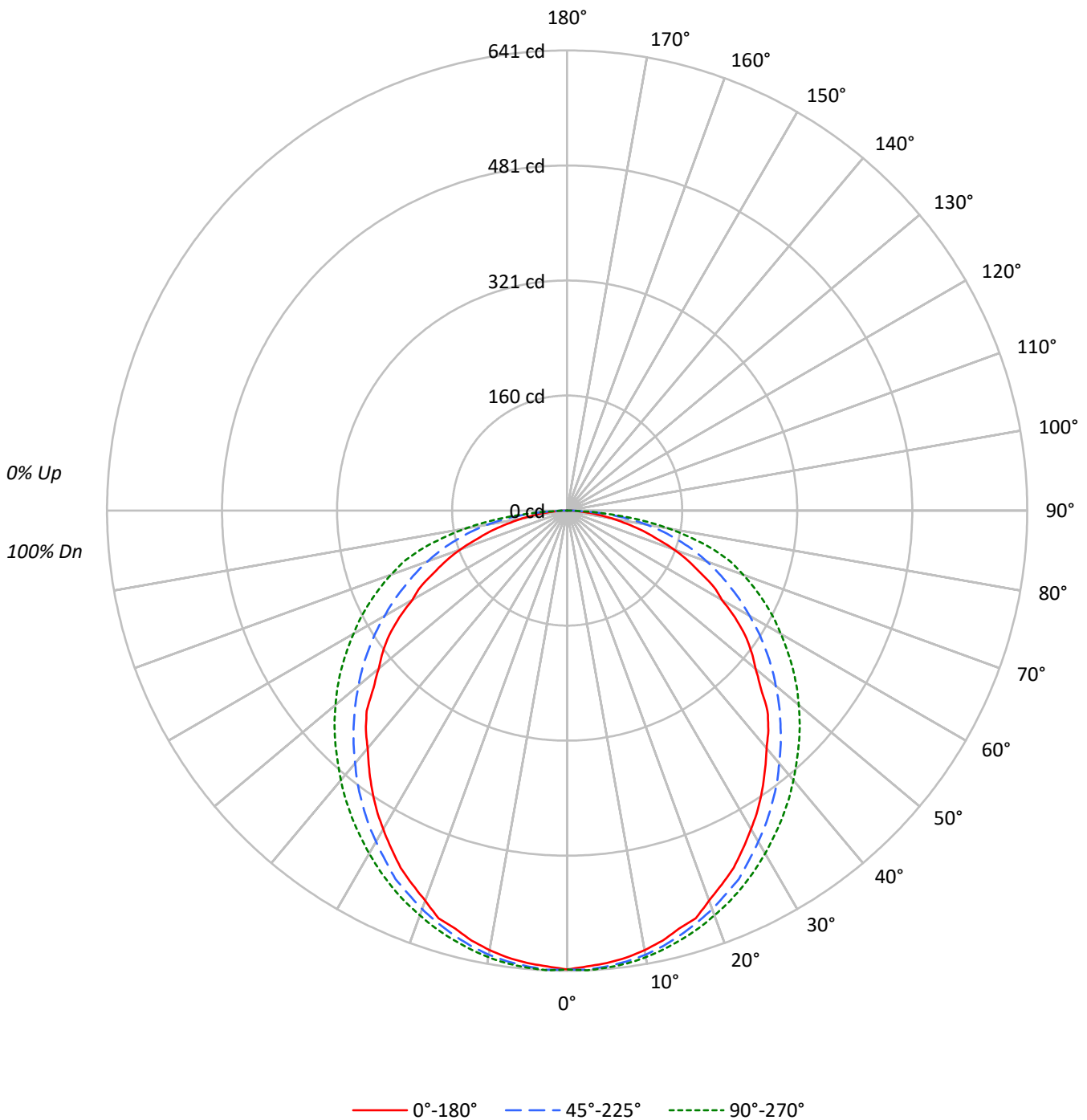
Lumens per Lamp: N/A
Luminaire Lumens: 1905.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 17.9
Input Voltage (V): NR
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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1720	1720	1720
5°	1709	1722	1726
10°	1699	1717	1726
15°	1679	1704	1722
20°	1655	1692	1718
25°	1630	1681	1716
30°	1592	1655	1714
35°	1557	1635	1716
40°	1518	1614	1723
45°	1502	1600	1738
50°	1435	1588	1763
55°	1420	1583	1801
60°	1340	1580	1850
65°	1300	1591	1933
70°	1248	1629	2052
75°	1137	1678	2208
80°	975	1737	2233
85°	787	1661	1914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	3.2
10°-20°	172.5	9.1
20°-30°	259.7	13.6
30°-40°	311.6	16.4
40°-50°	325.7	17.1
50°-60°	303.6	15.9
60°-70°	249.0	13.1
70°-80°	167.8	8.8
80°-90°	54.7	2.9
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°	492.7	25.9
0°-40°	804.3	42.2
0°-60°	1433.6	75.3
0°-90°	1905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	633	635	637	638	639	60
15°	603	606	612	617	618	170
25°	549	552	566	574	578	252
35°	474	480	498	515	522	296
45°	395	398	420	446	457	302
55°	303	308	337	369	384	268
65°	204	213	250	286	304	203
75°	109	121	161	198	212	115
85°	26	36	54	63	62	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	639.1	639.1	639.1	639.1	639.1
2.5°	635.5	637.3	640.1	641.0	641.0
5°	632.8	634.6	637.3	638.2	639.1
7.5°	628.2	630.0	633.7	635.5	636.4
10°	621.8	623.6	628.2	630.9	631.8
12.5°	613.6	615.4	620.9	624.6	625.5
15°	602.7	606.3	611.8	617.3	618.2
17.5°	595.4	594.5	601.8	608.1	610.0
20°	578.1	582.6	590.8	598.1	599.9
22.5°	563.5	567.1	578.1	586.3	589.9
25°	548.9	552.5	566.2	574.4	578.1
27.5°	530.6	536.1	548.9	560.7	565.3
30°	512.4	517.9	532.5	546.1	551.6
32.5°	494.2	500.6	516.1	530.6	537.0
35°	474.1	480.5	497.8	515.1	522.4
37.5°	453.1	461.4	479.6	498.7	506.9
40°	432.2	440.4	459.5	481.4	490.5
42.5°	414.9	418.5	440.4	464.1	473.2
45°	394.8	397.5	420.3	445.9	456.8
47.5°	365.6	375.6	400.3	428.5	439.5
50°	342.8	353.8	379.3	409.4	421.2
52.5°	323.7	331.0	359.2	389.3	403.0
55°	302.7	308.2	337.4	369.3	383.9
57.5°	277.2	287.2	316.4	349.2	363.8
60°	248.9	261.7	293.6	329.1	343.7
62.5°	230.7	238.0	272.6	308.2	324.6
65°	204.2	213.4	249.8	286.3	303.6
67.5°	182.4	191.5	228.9	265.3	282.6
70°	158.6	167.8	207.0	243.4	260.8
72.5°	131.3	144.1	185.1	221.6	239.8
75°	109.4	121.3	161.4	197.9	212.4
77.5°	84.8	100.3	137.7	167.8	178.7
80°	62.9	78.4	112.1	134.0	144.1
82.5°	42.9	58.4	83.9	100.3	105.8
85°	25.5	36.5	53.8	62.9	62.0
87.5°	11.9	15.5	21.9	21.9	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)