

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: P271975

Luminaire Tested: **22CZ2-24HE-UNV-L940-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: P271975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2064.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

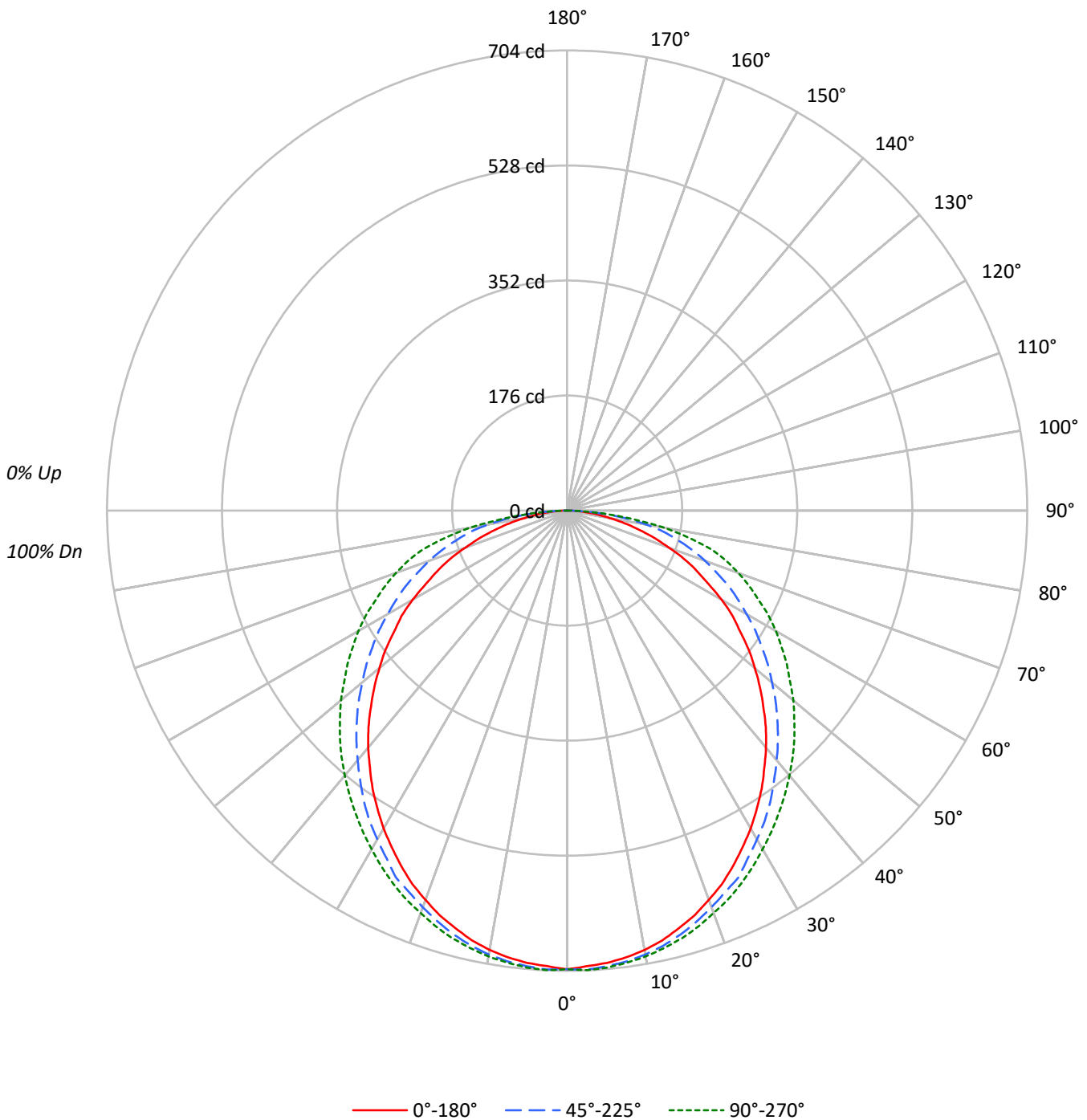
Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1889	1889	1889
5°	1877	1890	1896
10°	1865	1884	1893
15°	1842	1870	1887
20°	1815	1850	1876
25°	1782	1839	1870
30°	1745	1805	1859
35°	1705	1781	1855
40°	1663	1752	1859
45°	1615	1732	1871
50°	1569	1714	1892
55°	1515	1706	1925
60°	1470	1706	1984
65°	1397	1733	2057
70°	1302	1766	2190
75°	1194	1827	2365
80°	1038	1905	2329
85°	911	1692	1849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	3.2
10°-20°	189.0	9.2
20°-30°	283.8	13.7
30°-40°	339.1	16.4
40°-50°	352.6	17.1
50°-60°	326.8	15.8
60°-70°	268.1	13.0
70°-80°	181.2	8.8
80°-90°	56.9	2.8
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°	539.2	26.1
0°-40°	878.3	42.6
0°-60°	1557.8	75.5
0°-90°	2064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2064.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	695	696	700	701	702	66
15°	661	664	671	675	677	187
25°	600	605	620	627	630	276
35°	519	526	542	559	565	324
45°	424	433	455	481	492	328
55°	323	333	364	396	410	290
65°	219	232	272	308	323	217
75°	115	134	176	211	228	122
85°	30	41	55	61	60	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.8	701.8	701.8	701.8	701.8
2.5°	697.7	699.8	702.8	703.8	703.8
5°	694.7	695.7	699.8	700.8	701.8
7.5°	689.6	691.6	695.7	696.7	697.7
10°	682.5	684.5	689.6	691.6	692.7
12.5°	673.4	675.4	681.5	684.5	685.5
15°	661.2	664.2	671.3	675.4	677.4
17.5°	649.0	652.0	659.1	665.2	667.3
20°	633.8	640.9	645.9	654.1	655.1
22.5°	618.5	622.6	631.7	639.8	643.9
25°	600.2	605.3	619.5	626.6	629.7
27.5°	580.9	588.0	599.2	610.4	614.5
30°	561.6	566.7	580.9	594.1	598.2
32.5°	540.3	547.4	562.7	575.9	582.0
35°	519.0	526.1	542.3	558.6	564.7
37.5°	495.6	503.8	520.0	539.3	547.4
40°	473.3	479.4	498.7	522.0	529.1
42.5°	449.9	457.0	477.3	502.7	510.9
45°	424.5	432.7	455.0	481.4	491.6
47.5°	400.2	408.3	432.7	459.1	471.3
50°	374.8	384.9	409.3	439.8	452.0
52.5°	350.4	359.5	387.0	418.4	429.6
55°	323.0	333.1	363.6	396.1	410.3
57.5°	300.6	307.7	341.3	374.8	389.0
60°	273.2	282.3	316.9	352.4	368.7
62.5°	243.8	259.0	294.5	331.1	347.3
65°	219.4	231.6	272.2	307.7	323.0
67.5°	194.0	207.2	246.8	284.4	301.6
70°	165.5	182.8	224.5	262.0	278.3
72.5°	140.2	158.4	201.1	237.7	254.9
75°	114.8	134.1	175.7	211.3	227.5
77.5°	90.4	111.7	152.3	179.8	189.9
80°	67.0	87.3	122.9	142.2	150.3
82.5°	46.7	64.0	90.4	100.5	102.6
85°	29.5	40.6	54.8	60.9	59.9
87.5°	13.2	16.3	20.3	22.3	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)