

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: P272088

Luminaire Tested: **24CZ2-50HE-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: P272088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50HE-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (224) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4553.0 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

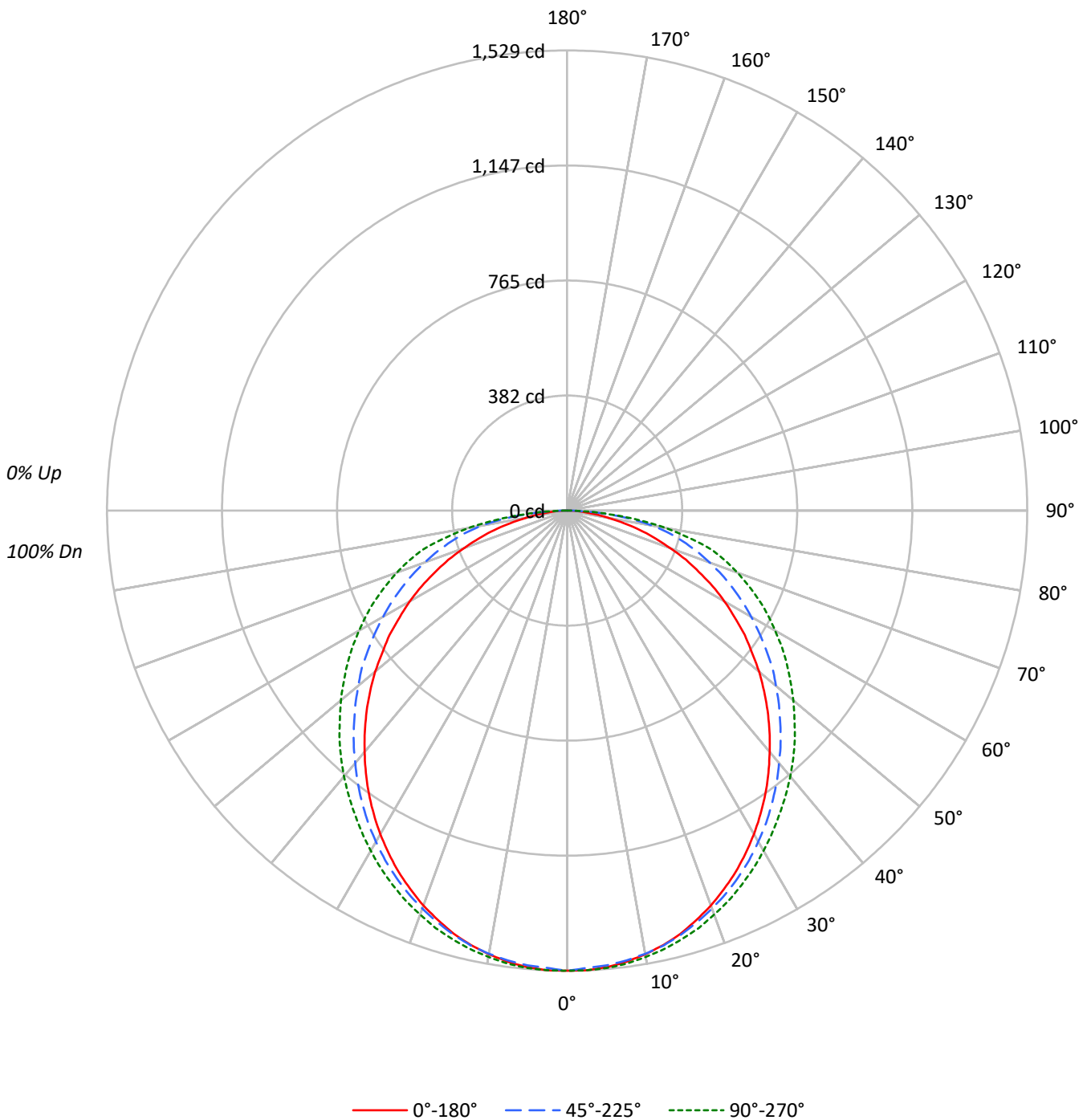
Input Watts (W): 38.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	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	58	56
4	81	69	59	52	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	50	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°	2057	2057	2057
5°	2056	2048	2061
10°	2045	2043	2057
15°	2028	2032	2053
20°	2000	2015	2045
25°	1967	1996	2037
30°	1929	1974	2028
35°	1887	1949	2022
40°	1839	1924	2026
45°	1793	1905	2036
50°	1743	1896	2055
55°	1690	1893	2092
60°	1623	1901	2147
65°	1538	1930	2240
70°	1429	1979	2367
75°	1303	2077	2567
80°	1072	2237	2567
85°	821	2064	2205



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	3.2
10°-20°	412.7	9.1
20°-30°	621.1	13.6
30°-40°	744.3	16.3
40°-50°	775.7	17.0
50°-60°	721.7	15.9
60°-70°	594.4	13.1
70°-80°	404.8	8.9
80°-90°	133.6	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°	1178.4	25.9
0°-40°	1922.8	42.2
0°-60°	3420.2	75.1
0°-90°	4553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4553.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1523	1523	1516	1524	1526	145
15°	1456	1457	1459	1472	1474	410
25°	1325	1331	1345	1368	1372	610
35°	1149	1162	1187	1219	1231	718
45°	942	962	1001	1052	1070	727
55°	720	745	807	871	892	642
65°	483	524	606	678	704	480
75°	251	307	400	471	494	264
85°	53	103	134	143	143	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1528.7	1528.7	1528.7	1528.7	1528.7
2.5°	1528.7	1528.7	1521.1	1528.7	1528.7
5°	1522.6	1522.6	1516.5	1524.1	1525.6
7.5°	1511.9	1513.5	1507.4	1516.5	1518.0
10°	1496.7	1498.3	1495.2	1504.3	1505.9
12.5°	1478.5	1480.0	1480.0	1490.7	1492.2
15°	1455.7	1457.2	1458.8	1472.4	1474.0
17.5°	1426.8	1431.4	1434.4	1451.2	1454.2
20°	1396.5	1401.0	1407.1	1425.3	1428.4
22.5°	1361.5	1367.6	1378.2	1398.0	1402.5
25°	1325.0	1331.1	1344.8	1367.6	1372.1
27.5°	1284.0	1293.1	1309.8	1334.2	1340.2
30°	1241.5	1250.6	1270.3	1296.2	1305.3
32.5°	1195.9	1208.0	1230.8	1259.7	1268.8
35°	1148.8	1162.4	1186.8	1218.7	1230.8
37.5°	1098.6	1113.8	1142.7	1177.6	1192.8
40°	1047.0	1065.2	1095.6	1136.6	1153.3
42.5°	995.3	1012.0	1050.0	1094.1	1112.3
45°	942.1	961.9	1001.4	1051.5	1069.8
47.5°	887.4	907.2	954.3	1007.5	1024.2
50°	832.7	852.5	905.6	961.9	981.6
52.5°	773.4	799.3	860.1	916.3	936.0
55°	720.3	744.6	806.9	870.7	892.0
57.5°	659.5	688.4	756.7	823.6	846.4
60°	603.3	633.6	706.6	775.0	797.8
62.5°	545.5	578.9	656.4	726.3	752.2
65°	483.2	524.2	606.3	677.7	703.5
67.5°	427.0	469.5	556.2	629.1	651.9
70°	363.2	414.8	503.0	575.9	601.7
72.5°	308.5	360.1	452.8	524.2	550.1
75°	250.7	306.9	399.6	471.1	493.8
77.5°	193.0	255.3	348.0	402.7	410.3
80°	138.3	203.6	288.7	320.6	331.3
82.5°	97.3	156.5	212.7	234.0	240.1
85°	53.2	103.3	133.7	142.8	142.8
87.5°	22.8	44.1	53.2	54.7	56.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)