

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: P274810

Luminaire Tested: **24CZ2-50HE-RDP-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: P274810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50HE-RDP-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 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: 3062.0 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

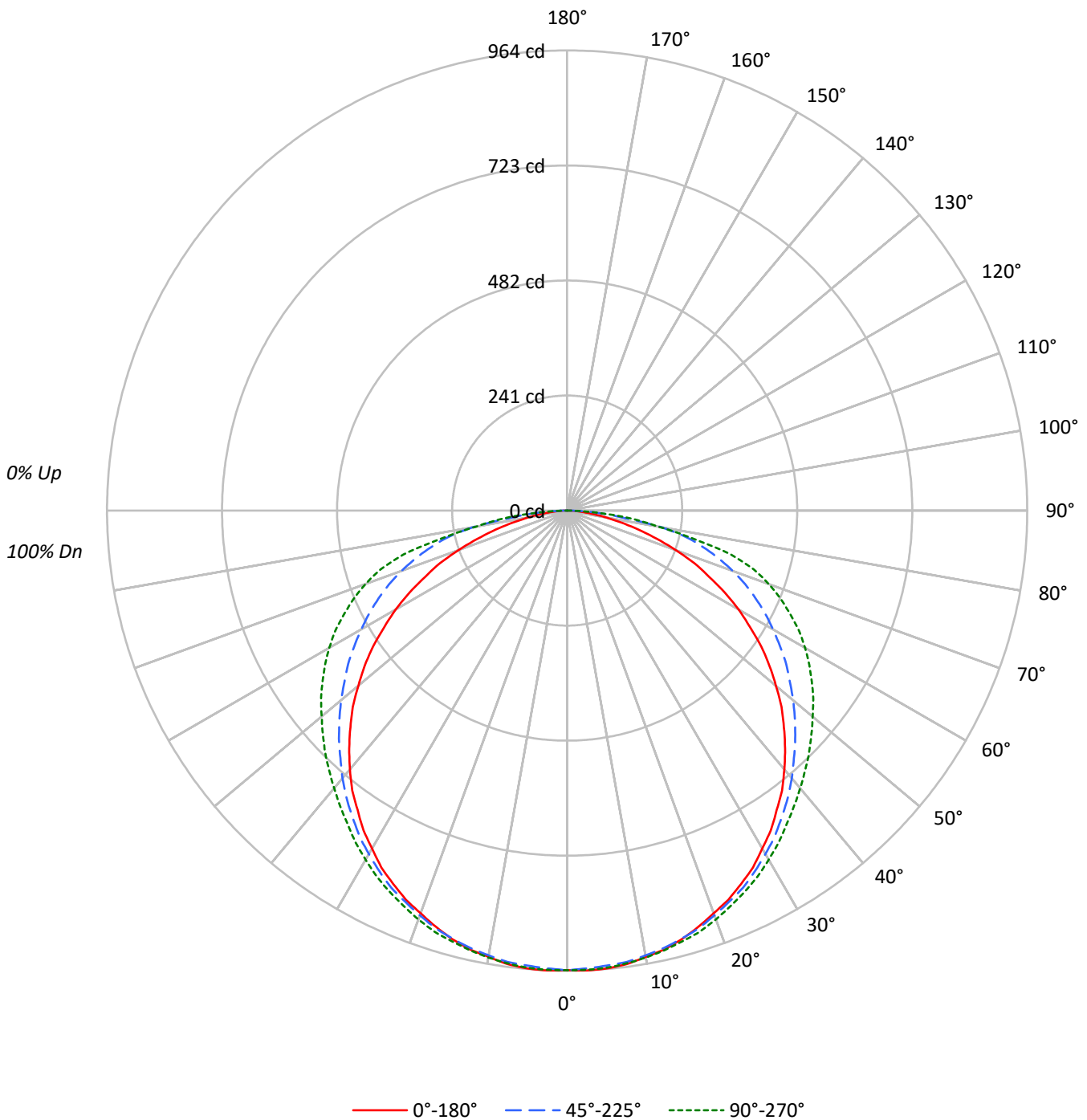
Input Watts (W): 38.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1296	1296	1296
5°	1301	1292	1298
10°	1297	1293	1299
15°	1295	1293	1301
20°	1285	1292	1305
25°	1281	1294	1308
30°	1269	1291	1312
35°	1257	1287	1317
40°	1243	1286	1334
45°	1222	1286	1364
50°	1195	1294	1405
55°	1165	1315	1468
60°	1116	1341	1549
65°	1045	1388	1644
70°	950	1452	1769
75°	805	1531	1848
80°	635	1542	1495
85°	469	1172	1314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	3.0
10°-20°	262.9	8.6
20°-30°	402.0	13.1
30°-40°	491.4	16.0
40°-50°	523.8	17.1
50°-60°	500.8	16.4
60°-70°	424.2	13.9
70°-80°	285.1	9.3
80°-90°	80.4	2.6
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°	756.2	24.7
0°-40°	1247.7	40.7
0°-60°	2272.2	74.2
0°-90°	3062.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3062.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	963	961	957	961	961	91
15°	930	930	928	936	934	262
25°	863	866	872	879	881	398
35°	766	772	784	799	802	480
45°	642	653	676	705	717	496
55°	497	515	560	604	626	442
65°	328	362	436	494	516	326
75°	155	211	295	345	355	166
85°	30	62	76	82	85	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.9	962.9	962.9	962.9	962.9
2.5°	964.4	964.4	959.9	962.9	962.9
5°	962.9	961.4	956.8	961.4	961.4
7.5°	958.4	956.8	953.8	958.4	956.8
10°	949.2	949.2	946.2	950.8	950.8
12.5°	941.6	940.1	938.6	944.7	943.2
15°	929.5	929.5	928.0	935.6	934.1
17.5°	914.3	915.8	917.3	923.4	924.9
20°	897.6	900.6	902.2	911.3	911.3
22.5°	882.4	883.9	887.0	896.1	896.1
25°	862.7	865.7	871.8	879.4	880.9
27.5°	842.9	844.4	852.0	862.7	864.2
30°	817.1	821.7	830.8	842.9	844.4
32.5°	794.3	798.9	809.5	821.7	824.7
35°	765.5	771.5	783.7	798.9	801.9
37.5°	739.6	744.2	759.4	776.1	780.7
40°	707.8	716.9	732.1	751.8	759.4
42.5°	675.9	685.0	703.2	729.0	738.1
45°	642.4	653.1	675.9	704.7	716.9
47.5°	609.0	621.2	647.0	680.4	694.1
50°	571.1	586.3	618.1	656.1	671.3
52.5°	534.6	552.8	587.8	630.3	650.0
55°	496.6	514.9	560.4	604.5	625.7
57.5°	454.1	478.4	528.5	578.7	601.4
60°	414.6	437.4	498.2	552.8	575.6
62.5°	372.1	402.5	467.8	525.5	548.3
65°	328.1	361.5	435.9	493.6	516.4
67.5°	288.6	325.0	404.0	461.7	484.5
70°	241.5	287.1	369.1	426.8	449.6
72.5°	197.4	247.6	332.6	388.8	410.1
75°	154.9	211.1	294.6	344.8	355.4
77.5°	115.4	174.7	255.2	276.4	268.8
80°	82.0	139.7	199.0	188.3	192.9
82.5°	53.2	106.3	123.0	139.7	144.3
85°	30.4	62.3	75.9	82.0	85.1
87.5°	13.7	22.8	30.4	30.4	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)