

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: P274812

Luminaire Tested: **24CZ2-50-RDP-UNV-L935-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: P274812
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: 24CZ2-50-RDP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2852.0 lumens
Efficiency: N/A
Efficacy: 58.7 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

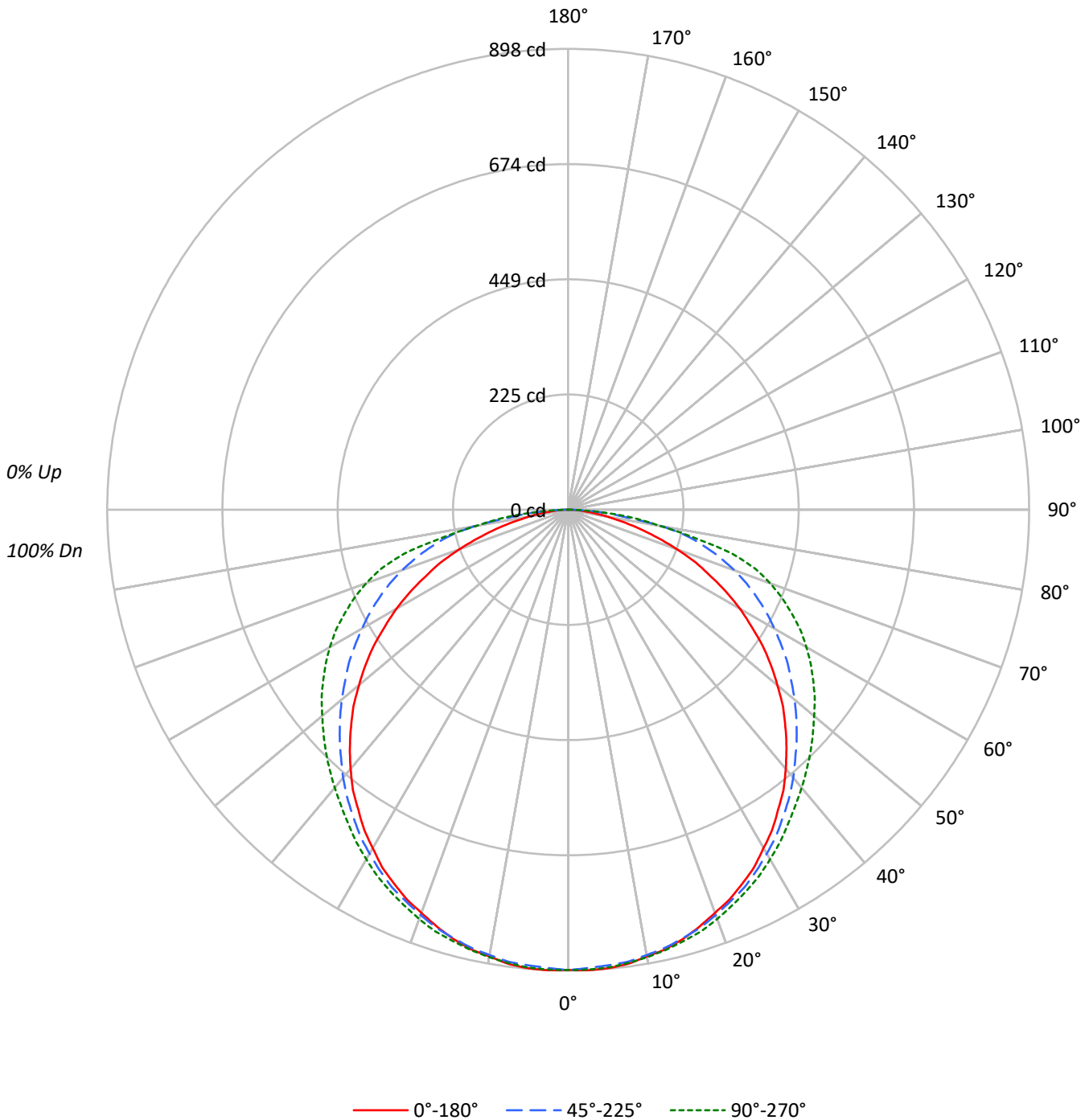
Input Watts (W): 48.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1207	1207	1207
5°	1211	1204	1209
10°	1208	1204	1210
15°	1206	1204	1212
20°	1197	1203	1215
25°	1193	1205	1218
30°	1182	1202	1222
35°	1171	1199	1227
40°	1158	1198	1242
45°	1139	1198	1271
50°	1113	1205	1309
55°	1085	1225	1367
60°	1039	1249	1443
65°	973	1293	1531
70°	885	1352	1647
75°	750	1426	1721
80°	592	1436	1392
85°	437	1091	1223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.1	3.0
10°-20°	244.9	8.6
20°-30°	374.4	13.1
30°-40°	457.7	16.0
40°-50°	487.9	17.1
50°-60°	466.5	16.4
60°-70°	395.1	13.9
70°-80°	265.6	9.3
80°-90°	74.9	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°	704.4	24.7
0°-40°	1162.1	40.7
0°-60°	2116.4	74.2
0°-90°	2852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2852.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	897	896	891	896	896	85
15°	866	866	864	871	870	244
25°	804	806	812	819	820	370
35°	713	719	730	744	747	447
45°	598	608	630	656	668	462
55°	463	480	522	563	583	412
65°	306	337	406	460	481	303
75°	144	197	274	321	331	154
85°	28	58	71	76	79	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.9	896.9	896.9	896.9	896.9
2.5°	898.3	898.3	894.0	896.9	896.9
5°	896.9	895.5	891.2	895.5	895.5
7.5°	892.6	891.2	888.4	892.6	891.2
10°	884.1	884.1	881.3	885.6	885.6
12.5°	877.1	875.7	874.2	879.9	878.5
15°	865.8	865.8	864.3	871.4	870.0
17.5°	851.6	853.0	854.4	860.1	861.5
20°	836.0	838.9	840.3	848.8	848.8
22.5°	821.9	823.3	826.1	834.6	834.6
25°	803.5	806.3	812.0	819.1	820.5
27.5°	785.1	786.5	793.6	803.5	804.9
30°	761.1	765.3	773.8	785.1	786.5
32.5°	739.8	744.1	754.0	765.3	768.1
35°	713.0	718.6	729.9	744.1	746.9
37.5°	688.9	693.2	707.3	722.9	727.1
40°	659.2	667.7	681.8	700.2	707.3
42.5°	629.5	638.0	655.0	679.0	687.5
45°	598.4	608.3	629.5	656.4	667.7
47.5°	567.3	578.6	602.6	633.8	646.5
50°	531.9	546.0	575.8	611.1	625.3
52.5°	497.9	514.9	547.5	587.1	605.5
55°	462.6	479.6	522.0	563.0	582.8
57.5°	423.0	445.6	492.3	539.0	560.2
60°	386.2	407.4	464.0	514.9	536.1
62.5°	346.6	374.9	435.7	489.5	510.7
65°	305.6	336.7	406.0	459.8	481.0
67.5°	268.8	302.7	376.3	430.0	451.3
70°	224.9	267.4	343.8	397.5	418.7
72.5°	183.9	230.6	309.8	362.1	381.9
75°	144.3	196.6	274.4	321.1	331.0
77.5°	107.5	162.7	237.7	257.5	250.4
80°	76.4	130.1	185.3	175.4	179.7
82.5°	49.5	99.0	114.6	130.1	134.4
85°	28.3	58.0	70.7	76.4	79.2
87.5°	12.7	21.2	28.3	28.3	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)