

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: P274811

Luminaire Tested: **24CZ2-50-RDP-UNV-L930-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: P274811
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-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

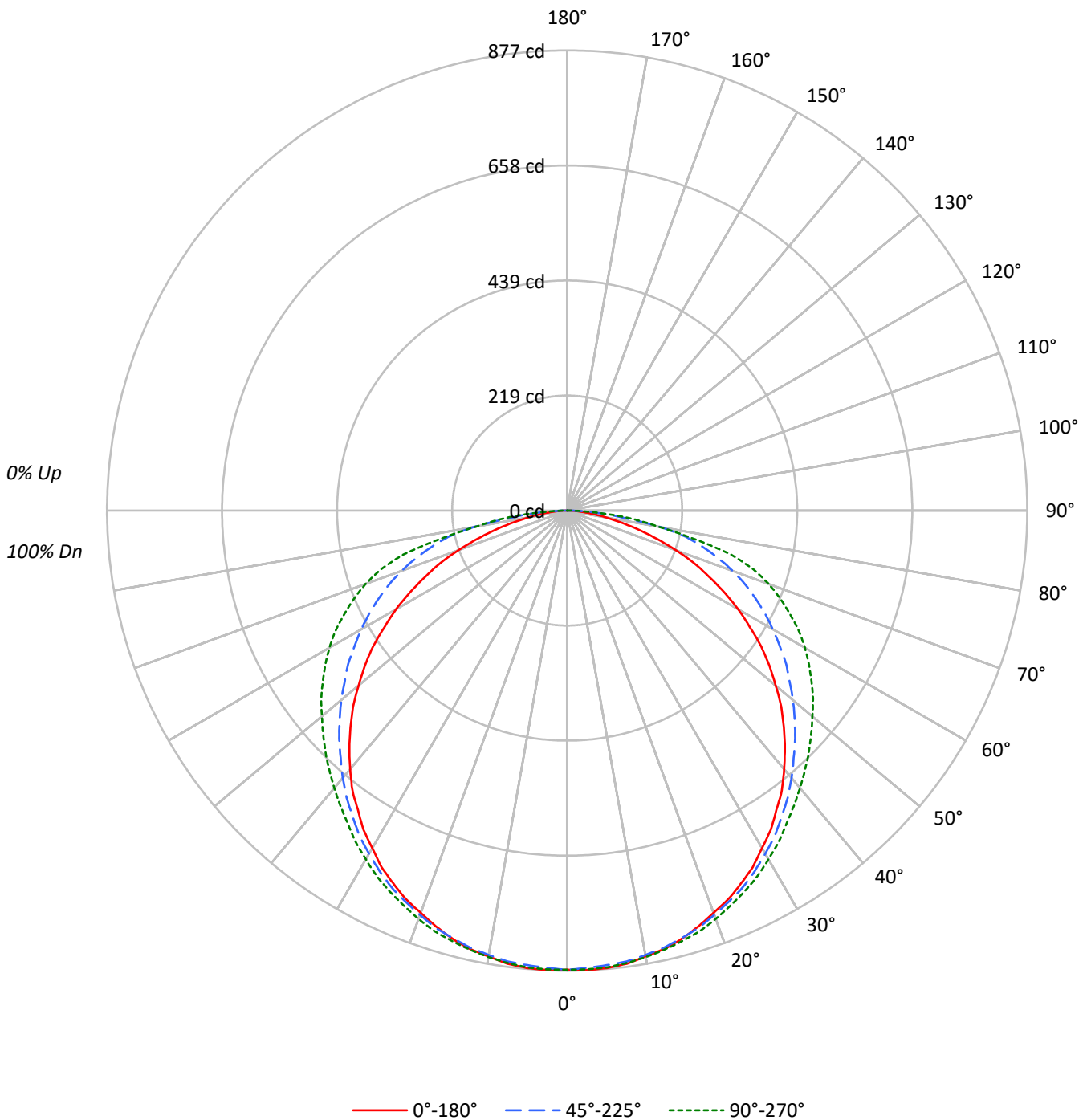
Lumens per Lamp: N/A
Luminaire Lumens: 2783.0 lumens
Efficiency: N/A
Efficacy: 57.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	68	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°	1178	1178	1178
5°	1182	1175	1180
10°	1179	1175	1181
15°	1177	1175	1182
20°	1168	1174	1186
25°	1164	1176	1189
30°	1154	1173	1192
35°	1143	1170	1197
40°	1130	1169	1212
45°	1111	1169	1240
50°	1086	1176	1277
55°	1059	1195	1334
60°	1014	1218	1408
65°	949	1261	1494
70°	864	1319	1607
75°	732	1392	1679
80°	577	1401	1358
85°	426	1065	1193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	3.0
10°-20°	238.9	8.6
20°-30°	365.4	13.1
30°-40°	446.7	16.0
40°-50°	476.0	17.1
50°-60°	455.2	16.4
60°-70°	385.6	13.9
70°-80°	259.1	9.3
80°-90°	73.1	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°	687.3	24.7
0°-40°	1134.0	40.7
0°-60°	2065.2	74.2
0°-90°	2783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2783.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	875	875	875	875	875	
5°	875	874	870	874	874	83
15°	845	845	843	850	849	238
25°	784	787	792	799	801	361
35°	696	701	712	726	729	436
45°	584	594	614	640	652	450
55°	451	468	509	549	569	402
65°	298	328	396	449	469	296
75°	141	192	268	313	323	151
85°	28	57	69	74	77	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	875.2	875.2	875.2	875.2	875.2
2.5°	876.6	876.6	872.4	875.2	875.2
5°	875.2	873.8	869.7	873.8	873.8
7.5°	871.0	869.7	866.9	871.0	869.7
10°	862.8	862.8	860.0	864.1	864.1
12.5°	855.8	854.5	853.1	858.6	857.2
15°	844.8	844.8	843.4	850.3	848.9
17.5°	831.0	832.4	833.8	839.3	840.7
20°	815.8	818.6	820.0	828.2	828.2
22.5°	802.0	803.4	806.2	814.4	814.4
25°	784.1	786.8	792.3	799.3	800.6
27.5°	766.1	767.5	774.4	784.1	785.4
30°	742.7	746.8	755.1	766.1	767.5
32.5°	721.9	726.1	735.8	746.8	749.6
35°	695.7	701.2	712.3	726.1	728.9
37.5°	672.3	676.4	690.2	705.4	709.5
40°	643.3	651.5	665.4	683.3	690.2
42.5°	614.3	622.6	639.1	662.6	670.9
45°	583.9	593.6	614.3	640.5	651.5
47.5°	553.5	564.6	588.1	618.4	630.8
50°	519.0	532.8	561.8	596.3	610.1
52.5°	485.9	502.5	534.2	572.9	590.8
55°	451.4	468.0	509.4	549.4	568.7
57.5°	412.7	434.8	480.4	525.9	546.6
60°	376.8	397.6	452.8	502.5	523.2
62.5°	338.2	365.8	425.2	477.6	498.3
65°	298.2	328.5	396.2	448.6	469.3
67.5°	262.3	295.4	367.2	419.6	440.3
70°	219.5	260.9	335.4	387.9	408.6
72.5°	179.5	225.0	302.3	353.4	372.7
75°	140.8	191.9	267.8	313.4	323.0
77.5°	104.9	158.7	231.9	251.2	244.3
80°	74.5	127.0	180.8	171.2	175.3
82.5°	48.3	96.6	111.8	127.0	131.1
85°	27.6	56.6	69.0	74.5	77.3
87.5°	12.4	20.7	27.6	27.6	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)