

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: P274813

Luminaire Tested: **24CZ2-50-RDP-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: P274813
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-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

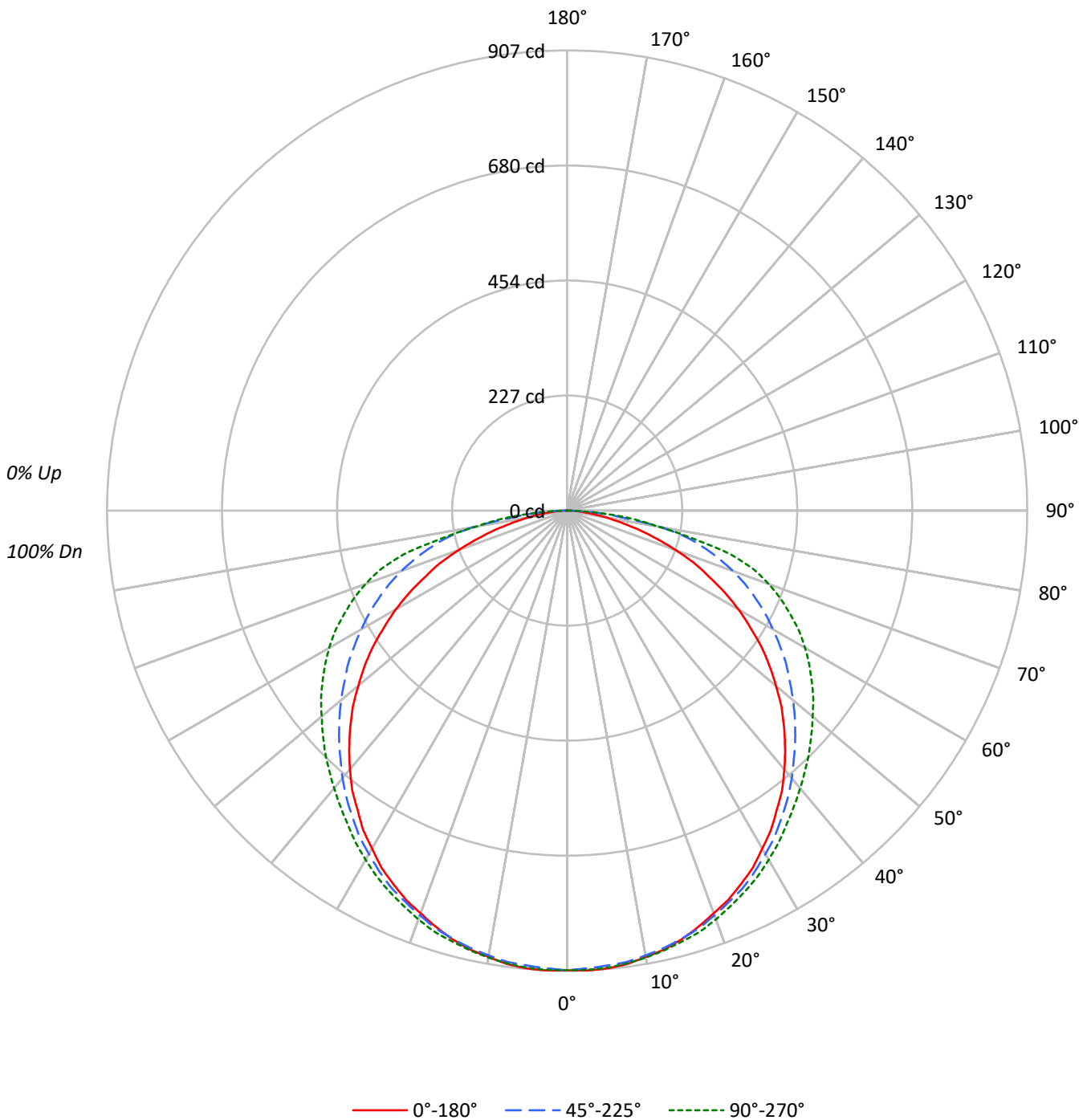
Lumens per Lamp: N/A
Luminaire Lumens: 2881.0 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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°	1219	1219	1219
5°	1224	1216	1222
10°	1220	1216	1222
15°	1218	1216	1224
20°	1209	1215	1228
25°	1205	1218	1230
30°	1194	1214	1234
35°	1183	1211	1239
40°	1170	1210	1255
45°	1150	1210	1283
50°	1125	1217	1322
55°	1096	1237	1381
60°	1050	1261	1457
65°	983	1306	1547
70°	894	1366	1664
75°	758	1441	1738
80°	598	1450	1406
85°	442	1104	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	3.0
10°-20°	247.3	8.6
20°-30°	378.2	13.1
30°-40°	462.4	16.0
40°-50°	492.8	17.1
50°-60°	471.2	16.4
60°-70°	399.2	13.9
70°-80°	268.3	9.3
80°-90°	75.7	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°	711.5	24.7
0°-40°	1173.9	40.7
0°-60°	2137.9	74.2
0°-90°	2881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	906	905	900	905	905	86
15°	875	875	873	880	879	247
25°	812	814	820	827	829	374
35°	720	726	737	752	754	451
45°	604	614	636	663	674	466
55°	467	484	527	569	589	416
65°	309	340	410	464	486	306
75°	146	199	277	324	334	156
85°	29	59	72	77	80	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.0	906.0	906.0	906.0	906.0
2.5°	907.4	907.4	903.1	906.0	906.0
5°	906.0	904.6	900.3	904.6	904.6
7.5°	901.7	900.3	897.4	901.7	900.3
10°	893.1	893.1	890.3	894.6	894.6
12.5°	886.0	884.6	883.1	888.8	887.4
15°	874.6	874.6	873.1	880.3	878.8
17.5°	860.3	861.7	863.1	868.8	870.3
20°	844.5	847.4	848.8	857.4	857.4
22.5°	830.3	831.7	834.5	843.1	843.1
25°	811.7	814.5	820.3	827.4	828.8
27.5°	793.1	794.5	801.7	811.7	813.1
30°	768.8	773.1	781.7	793.1	794.5
32.5°	747.4	751.7	761.7	773.1	776.0
35°	720.2	725.9	737.4	751.7	754.5
37.5°	695.9	700.2	714.5	730.2	734.5
40°	665.9	674.5	688.8	707.4	714.5
42.5°	635.9	644.5	661.6	685.9	694.5
45°	604.5	614.5	635.9	663.1	674.5
47.5°	573.0	584.5	608.8	640.2	653.1
50°	537.3	551.6	581.6	617.3	631.6
52.5°	503.0	520.2	553.0	593.0	611.6
55°	467.3	484.4	527.3	568.7	588.8
57.5°	427.3	450.1	497.3	544.5	565.9
60°	390.1	411.6	468.7	520.2	541.6
62.5°	350.1	378.7	440.1	494.4	515.9
65°	308.7	340.1	410.1	464.4	485.9
67.5°	271.5	305.8	380.1	434.4	455.9
70°	227.2	270.1	347.2	401.6	423.0
72.5°	185.8	232.9	313.0	365.8	385.8
75°	145.8	198.6	277.2	324.4	334.4
77.5°	108.6	164.3	240.1	260.1	252.9
80°	77.2	131.5	187.2	177.2	181.5
82.5°	50.0	100.0	115.7	131.5	135.8
85°	28.6	58.6	71.5	77.2	80.0
87.5°	12.9	21.4	28.6	28.6	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)