

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: P272067

Luminaire Tested: **24CZ2-35-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: P272067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-UNV-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

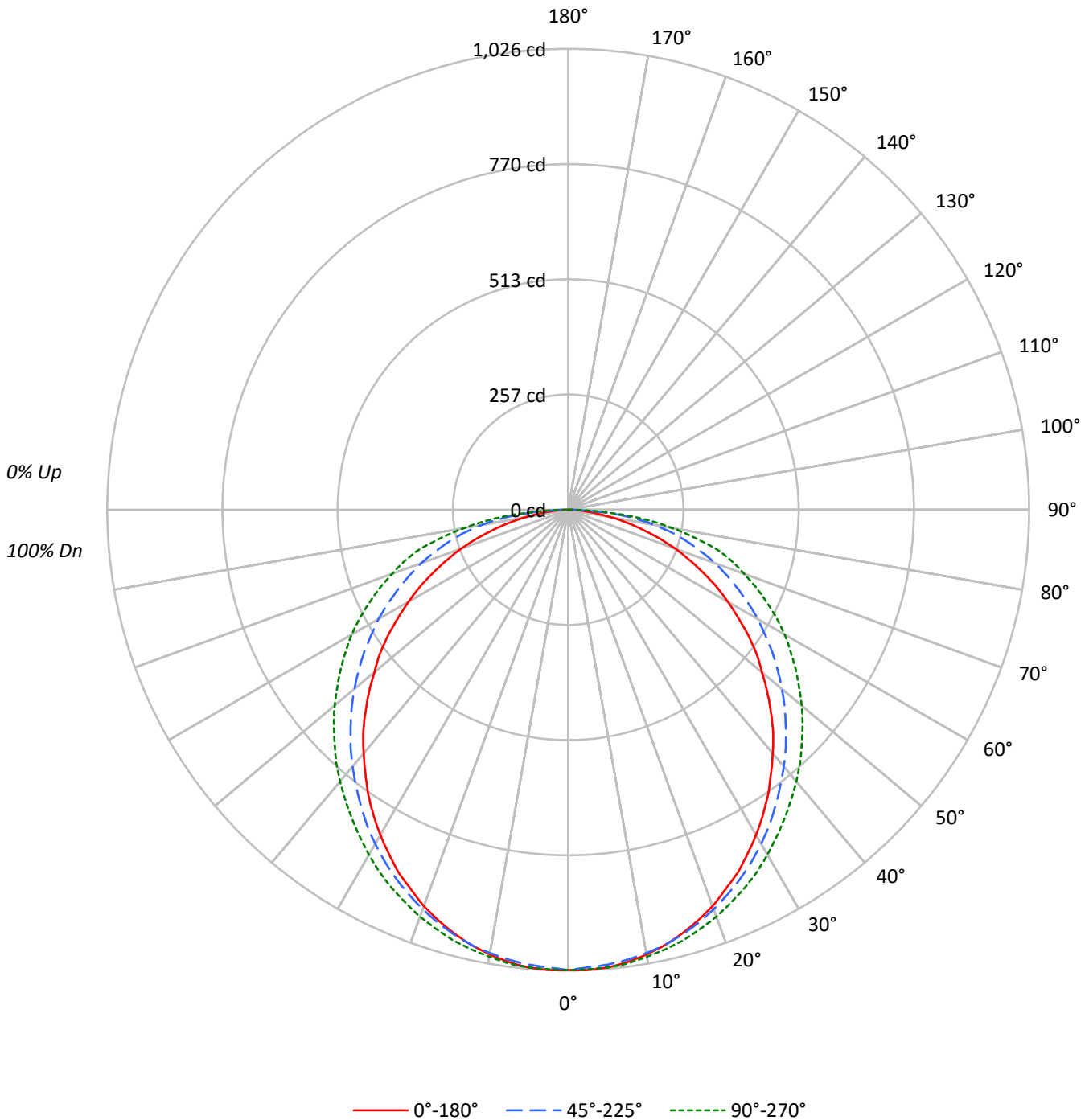
Lumens per Lamp: N/A
Luminaire Lumens: 3108.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 30.1
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	92	89	92	89	87	88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1379	1379	1379
5°	1382	1373	1382
10°	1374	1369	1381
15°	1362	1365	1382
20°	1345	1355	1381
25°	1324	1346	1379
30°	1299	1335	1378
35°	1274	1321	1379
40°	1244	1311	1387
45°	1215	1303	1399
50°	1178	1299	1420
55°	1149	1301	1449
60°	1104	1312	1498
65°	1054	1326	1553
70°	998	1367	1639
75°	890	1426	1790
80°	759	1510	1829
85°	542	1496	1751



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	3.1
10°-20°	277.4	8.9
20°-30°	418.9	13.5
30°-40°	504.9	16.2
40°-50°	530.1	17.1
50°-60°	495.9	16.0
60°-70°	409.5	13.2
70°-80°	279.1	9.0
80°-90°	95.2	3.1
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°	793.3	25.5
0°-40°	1298.2	41.8
0°-60°	2324.2	74.8
0°-90°	3108.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3108.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1025	1025	1025	1025	1025	
5°	1023	1022	1017	1023	1023	97
15°	978	979	980	990	992	276
25°	892	896	906	924	929	410
35°	775	784	804	831	839	485
45°	638	652	685	722	735	492
55°	490	509	555	600	618	437
65°	331	359	417	469	488	328
75°	171	210	274	326	344	183
85°	35	69	97	109	113	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1025.0	1025.0	1025.0	1025.0	1025.0
2.5°	1026.0	1025.0	1019.8	1025.0	1024.0
5°	1022.9	1021.9	1016.7	1022.9	1022.9
7.5°	1015.7	1015.7	1010.6	1017.8	1018.8
10°	1005.4	1005.4	1002.3	1010.6	1010.6
12.5°	993.0	993.0	993.0	1001.3	1002.3
15°	977.6	978.6	979.6	989.9	992.0
17.5°	959.0	961.1	964.2	976.5	978.6
20°	939.4	941.5	946.6	961.1	964.2
22.5°	914.7	919.8	927.0	943.5	946.6
25°	892.0	896.1	906.4	923.9	929.1
27.5°	864.1	870.3	883.7	902.3	909.5
30°	836.3	842.5	859.0	880.6	886.8
32.5°	806.4	815.7	833.2	855.9	863.1
35°	775.4	783.7	804.3	831.1	839.4
37.5°	741.4	752.8	775.4	804.3	814.6
40°	708.4	720.8	746.6	777.5	789.9
42.5°	675.4	687.8	716.7	751.7	764.1
45°	638.3	651.7	684.7	721.8	735.2
47.5°	601.2	617.7	653.8	693.0	707.4
50°	563.0	581.6	620.8	662.0	678.5
52.5°	529.0	546.5	587.8	632.1	647.6
55°	489.8	509.4	554.8	600.1	617.7
57.5°	449.6	471.2	519.7	569.2	586.7
60°	410.4	434.1	487.7	537.2	556.8
62.5°	372.3	396.0	451.7	503.2	522.8
65°	331.0	358.9	416.6	469.2	487.7
67.5°	291.8	321.7	382.6	434.1	452.7
70°	253.7	282.5	347.5	398.0	416.6
72.5°	212.4	245.4	310.4	363.0	382.6
75°	171.2	210.4	274.3	325.9	344.4
77.5°	133.0	173.2	237.2	279.4	288.7
80°	98.0	139.2	194.9	224.8	236.1
82.5°	62.9	104.1	148.5	170.1	179.4
85°	35.1	69.1	96.9	109.3	113.4
87.5°	14.4	29.9	39.2	44.3	44.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)