

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: P272076

Luminaire Tested: **24CZ2-40-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: P272076
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: 24CZ2-40-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3805.0 lumens
Efficiency: N/A
Efficacy: 105.1 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

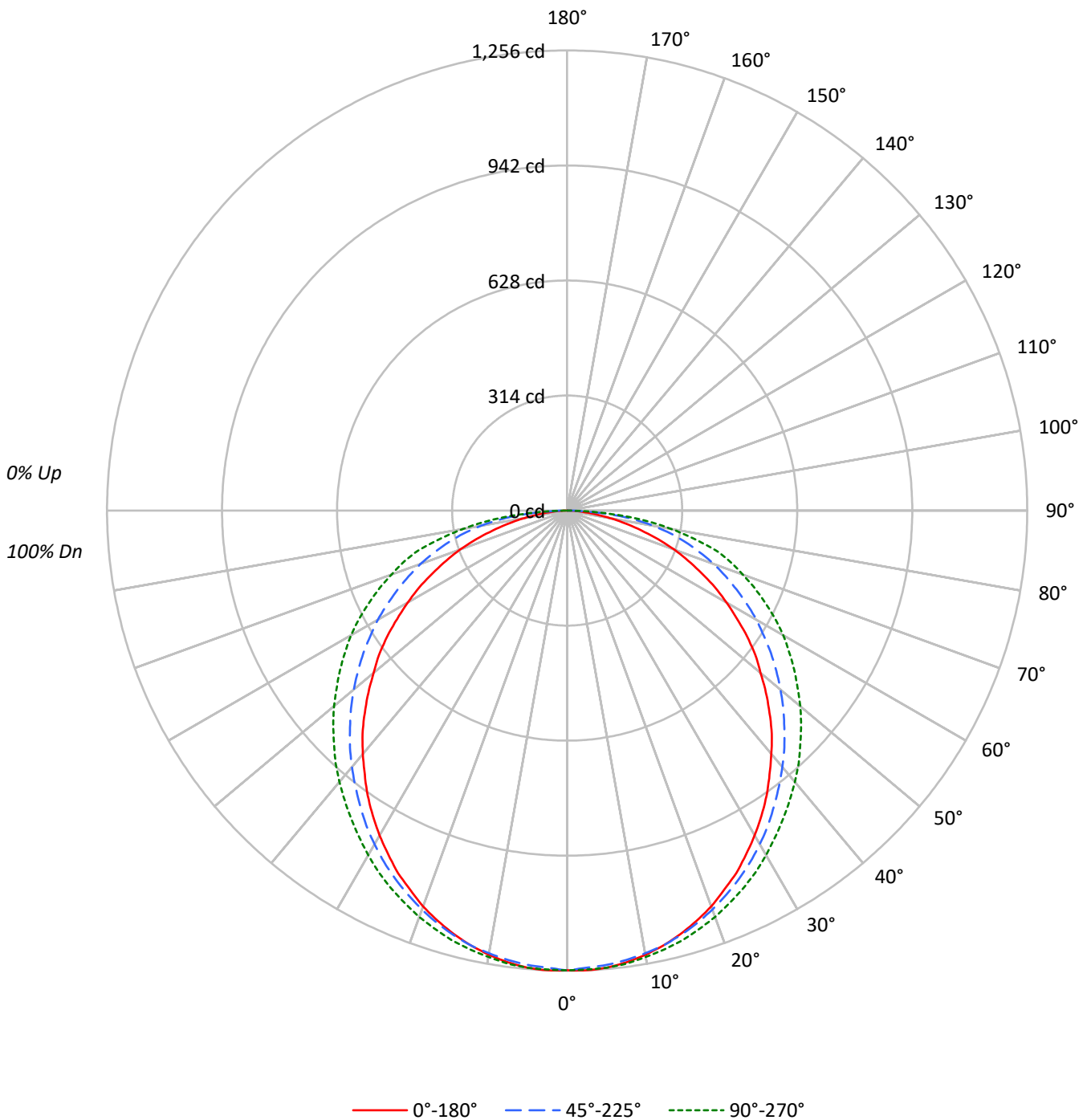
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1688	1688	1688
5°	1691	1681	1691
10°	1682	1677	1690
15°	1667	1671	1692
20°	1647	1659	1690
25°	1621	1647	1689
30°	1591	1634	1687
35°	1559	1617	1688
40°	1523	1605	1698
45°	1487	1595	1713
50°	1443	1591	1739
55°	1407	1593	1774
60°	1352	1607	1834
65°	1290	1624	1901
70°	1222	1674	2006
75°	1090	1746	2192
80°	929	1849	2240
85°	662	1832	2144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.8	3.1
10°-20°	339.6	8.9
20°-30°	512.9	13.5
30°-40°	618.1	16.2
40°-50°	649.0	17.1
50°-60°	607.1	16.0
60°-70°	501.4	13.2
70°-80°	341.7	9.0
80°-90°	116.5	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°	971.2	25.5
0°-40°	1589.4	41.8
0°-60°	2845.5	74.8
0°-90°	3805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1252	1251	1245	1252	1252	119
15°	1197	1198	1199	1212	1214	337
25°	1092	1097	1110	1131	1137	502
35°	949	959	985	1018	1028	593
45°	781	798	838	884	900	603
55°	600	624	679	735	756	535
65°	405	439	510	574	597	402
75°	210	258	336	399	422	223
85°	43	85	119	134	139	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.9	1254.9	1254.9	1254.9	1254.9
2.5°	1256.1	1254.9	1248.5	1254.9	1253.6
5°	1252.3	1251.1	1244.8	1252.3	1252.3
7.5°	1243.5	1243.5	1237.2	1246.0	1247.3
10°	1230.9	1230.9	1227.1	1237.2	1237.2
12.5°	1215.7	1215.7	1215.7	1225.8	1227.1
15°	1196.8	1198.0	1199.3	1211.9	1214.5
17.5°	1174.1	1176.6	1180.4	1195.5	1198.0
20°	1150.1	1152.6	1158.9	1176.6	1180.4
22.5°	1119.8	1126.1	1134.9	1155.1	1158.9
25°	1092.0	1097.1	1109.7	1131.1	1137.4
27.5°	1057.9	1065.5	1081.9	1104.6	1113.5
30°	1023.8	1031.4	1051.6	1078.1	1085.7
32.5°	987.2	998.6	1020.0	1047.8	1056.7
35°	949.3	959.4	984.7	1017.5	1027.6
37.5°	907.7	921.6	949.3	984.7	997.3
40°	867.3	882.4	914.0	951.9	967.0
42.5°	826.9	842.0	877.4	920.3	935.5
45°	781.4	797.9	838.3	883.7	900.1
47.5°	736.0	756.2	800.4	848.4	866.0
50°	689.3	712.0	760.0	810.5	830.7
52.5°	647.6	669.1	719.6	773.9	792.8
55°	599.7	623.6	679.2	734.7	756.2
57.5°	550.4	576.9	636.3	696.9	718.3
60°	502.4	531.5	597.1	657.7	681.7
62.5°	455.7	484.8	552.9	616.1	640.1
65°	405.2	439.3	510.0	574.4	597.1
67.5°	357.3	393.9	468.4	531.5	554.2
70°	310.6	345.9	425.4	487.3	510.0
72.5°	260.1	300.5	380.0	444.4	468.4
75°	209.6	257.5	335.8	398.9	421.7
77.5°	162.9	212.1	290.4	342.1	353.5
80°	119.9	170.4	238.6	275.2	289.1
82.5°	77.0	127.5	181.8	208.3	219.7
85°	42.9	84.6	118.7	133.8	138.9
87.5°	17.7	36.6	48.0	54.3	54.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)