

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: P274797

Luminaire Tested: **24CZ2-40-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: P274797
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: 24CZ2-40-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: 2411.0 lumens
Efficiency: N/A
Efficacy: 66.6 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

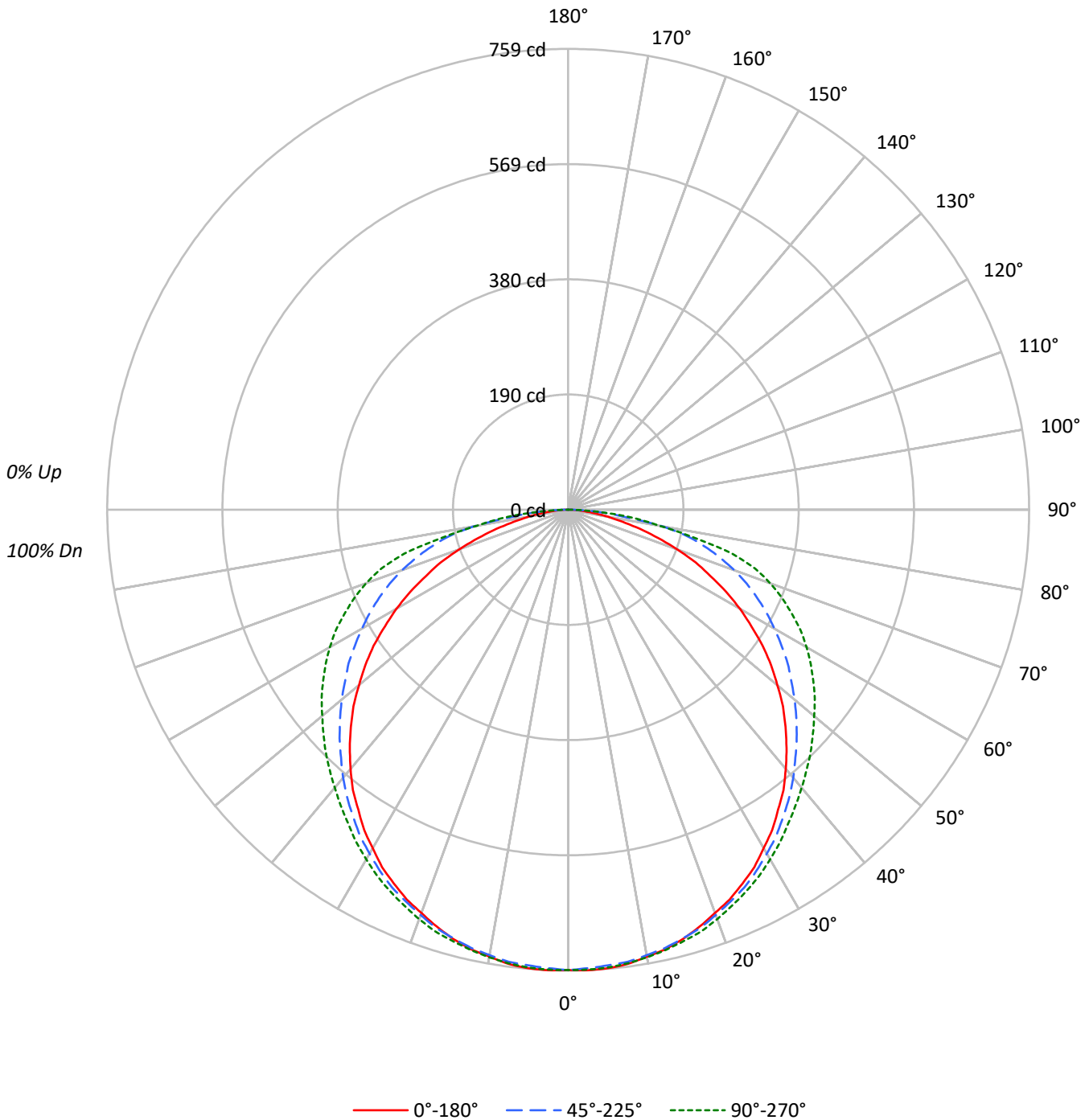
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1020	1020	1020
5°	1024	1018	1022
10°	1021	1018	1023
15°	1020	1018	1025
20°	1012	1017	1027
25°	1008	1019	1030
30°	1000	1016	1033
35°	990	1014	1037
40°	979	1012	1050
45°	963	1013	1074
50°	941	1019	1106
55°	917	1035	1156
60°	879	1056	1220
65°	822	1093	1294
70°	748	1143	1393
75°	634	1206	1455
80°	501	1214	1177
85°	369	923	1034



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	3.0
10°-20°	207.0	8.6
20°-30°	316.5	13.1
30°-40°	387.0	16.0
40°-50°	412.4	17.1
50°-60°	394.3	16.4
60°-70°	334.0	13.9
70°-80°	224.5	9.3
80°-90°	63.3	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°	595.4	24.7
0°-40°	982.4	40.7
0°-60°	1789.1	74.2
0°-90°	2411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	758	757	753	757	757	72
15°	732	732	731	737	736	206
25°	679	682	686	692	694	313
35°	603	608	617	629	631	378
45°	506	514	532	555	564	390
55°	391	405	441	476	493	348
65°	258	285	343	389	407	256
75°	122	166	232	272	280	131
85°	24	49	60	65	67	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.2	758.2	758.2	758.2	758.2
2.5°	759.4	759.4	755.8	758.2	758.2
5°	758.2	757.0	753.4	757.0	757.0
7.5°	754.6	753.4	751.0	754.6	753.4
10°	747.4	747.4	745.0	748.6	748.6
12.5°	741.4	740.3	739.1	743.8	742.6
15°	731.9	731.9	730.7	736.7	735.5
17.5°	719.9	721.1	722.3	727.1	728.3
20°	706.8	709.2	710.4	717.5	717.5
22.5°	694.8	696.0	698.4	705.6	705.6
25°	679.3	681.7	686.4	692.4	693.6
27.5°	663.7	664.9	670.9	679.3	680.5
30°	643.4	647.0	654.1	663.7	664.9
32.5°	625.4	629.0	637.4	647.0	649.4
35°	602.7	607.5	617.1	629.0	631.4
37.5°	582.4	586.0	597.9	611.1	614.7
40°	557.3	564.5	576.4	592.0	597.9
42.5°	532.2	539.3	553.7	574.0	581.2
45°	505.9	514.2	532.2	554.9	564.5
47.5°	479.5	489.1	509.4	535.8	546.5
50°	449.7	461.6	486.7	516.6	528.6
52.5°	421.0	435.3	462.8	496.3	511.8
55°	391.1	405.4	441.3	476.0	492.7
57.5°	357.6	376.7	416.2	455.6	473.6
60°	326.5	344.4	392.3	435.3	453.2
62.5°	293.0	316.9	368.3	413.8	431.7
65°	258.3	284.6	343.2	388.7	406.6
67.5°	227.2	255.9	318.1	363.5	381.5
70°	190.1	226.0	290.6	336.0	354.0
72.5°	155.5	194.9	261.9	306.1	322.9
75°	122.0	166.2	232.0	271.5	279.8
77.5°	90.9	137.5	200.9	217.7	211.7
80°	64.6	110.0	156.7	148.3	151.9
82.5°	41.9	83.7	96.9	110.0	113.6
85°	23.9	49.0	59.8	64.6	67.0
87.5°	10.8	17.9	23.9	23.9	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)