

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: P274713

Luminaire Tested: **14CZ2-39-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: P274713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-RDP-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2155.0 lumens
Efficiency: N/A
Efficacy: 66.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

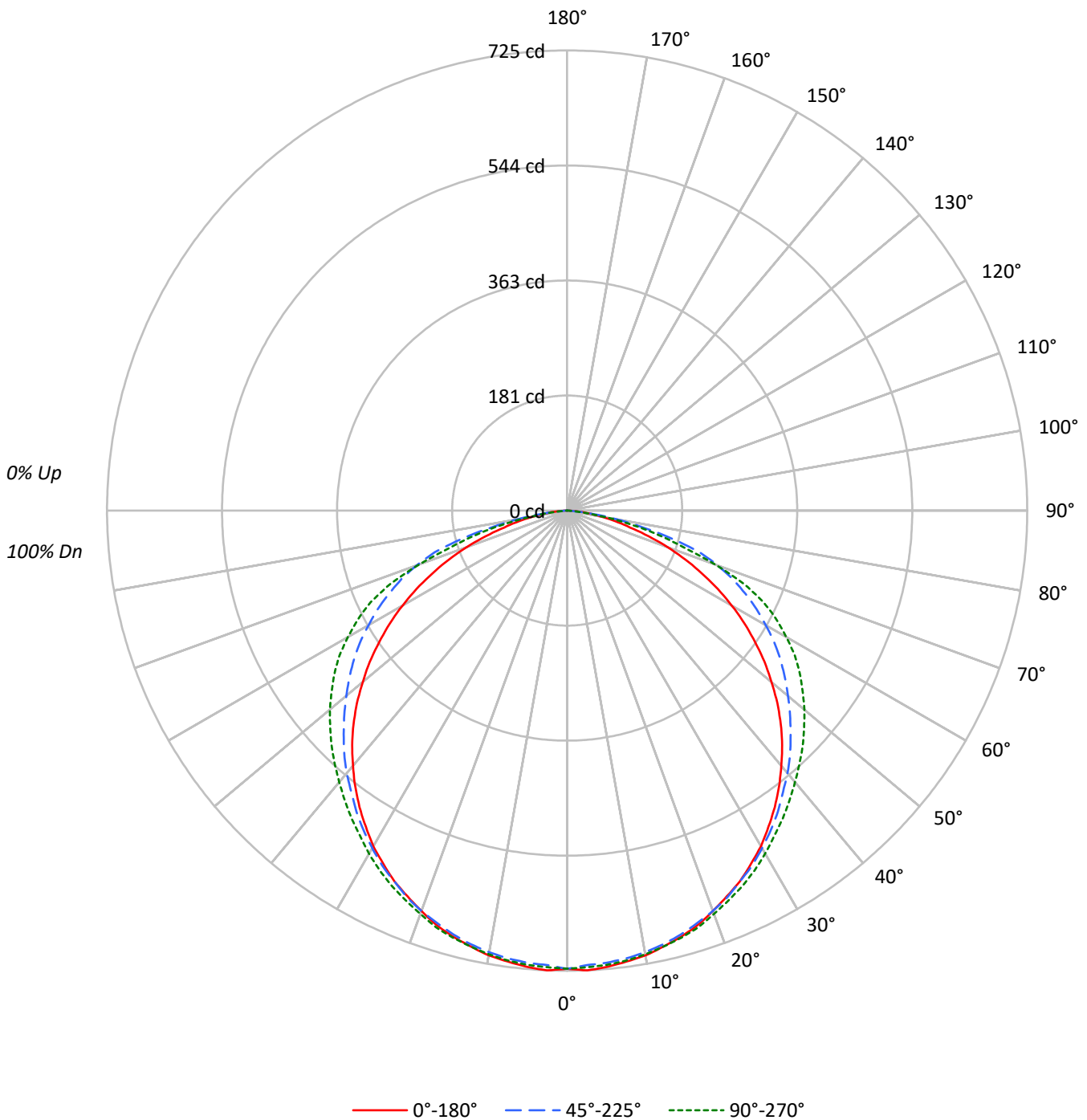
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1942	1942	1942
5°	1950	1931	1941
10°	1945	1931	1940
15°	1936	1926	1940
20°	1922	1922	1937
25°	1913	1913	1938
30°	1898	1908	1940
35°	1873	1901	1945
40°	1844	1897	1962
45°	1812	1895	1998
50°	1761	1902	2043
55°	1697	1926	2099
60°	1612	1947	2146
65°	1489	1971	2174
70°	1323	1986	1946
75°	1067	1784	1556
80°	834	1252	1017
85°	571	364	259



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.2
10°-20°	196.0	9.1
20°-30°	298.4	13.8
30°-40°	363.5	16.9
40°-50°	385.7	17.9
50°-60°	364.0	16.9
60°-70°	293.9	13.6
70°-80°	159.4	7.4
80°-90°	25.8	1.2
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°	562.8	26.1
0°-40°	926.3	43.0
0°-60°	1675.9	77.8
0°-90°	2155.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2155.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	722	720	715	720	718	69
15°	695	693	692	696	696	196
25°	644	643	644	651	653	297
35°	570	574	579	590	592	357
45°	476	483	498	516	525	367
55°	362	377	410	437	448	323
65°	234	262	310	335	342	232
75°	103	150	172	155	150	112
85°	18	20	12	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.8	721.8	721.8	721.8	721.8
2.5°	725.1	721.8	716.7	721.8	720.1
5°	721.8	720.1	715.0	720.1	718.4
7.5°	716.7	716.7	711.7	715.0	715.0
10°	711.7	710.0	706.6	711.7	710.0
12.5°	703.3	701.6	699.9	704.9	703.3
15°	694.8	693.2	691.5	696.5	696.5
17.5°	684.8	683.1	681.4	688.1	688.1
20°	671.3	671.3	671.3	678.0	676.3
22.5°	657.8	657.8	659.5	666.2	664.6
25°	644.4	642.7	644.4	651.1	652.8
27.5°	627.5	629.2	630.9	637.6	639.3
30°	610.7	612.4	614.1	622.5	624.2
32.5°	590.5	593.9	597.3	607.4	607.4
35°	570.3	573.7	578.8	590.5	592.2
37.5°	548.5	551.8	558.6	572.0	575.4
40°	524.9	530.0	540.1	553.5	558.6
42.5°	501.4	508.1	519.9	535.0	541.7
45°	476.1	482.9	498.0	516.5	524.9
47.5°	449.2	457.6	476.1	499.7	506.4
50°	420.6	432.4	454.3	479.5	487.9
52.5°	392.0	405.5	432.4	459.3	467.7
55°	361.7	376.9	410.5	437.4	447.5
57.5°	331.4	348.3	387.0	415.6	425.7
60°	299.5	319.7	361.7	390.3	398.7
62.5°	267.5	291.1	336.5	365.1	371.8
65°	233.9	262.5	309.6	334.8	341.5
67.5°	201.9	235.5	282.6	301.2	301.2
70°	168.2	205.3	252.4	257.4	247.3
72.5°	134.6	176.7	218.7	200.2	191.8
75°	102.6	149.7	171.6	154.8	149.7
77.5°	77.4	121.1	121.1	111.0	107.7
80°	53.8	92.5	80.8	70.7	65.6
82.5°	35.3	52.2	42.1	33.6	28.6
85°	18.5	20.2	11.8	10.1	8.4
87.5°	6.7	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)