

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: P271903

Luminaire Tested: **14CZ2-29-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: P271903
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-UNV-L940-CD1-U
Description: 1'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

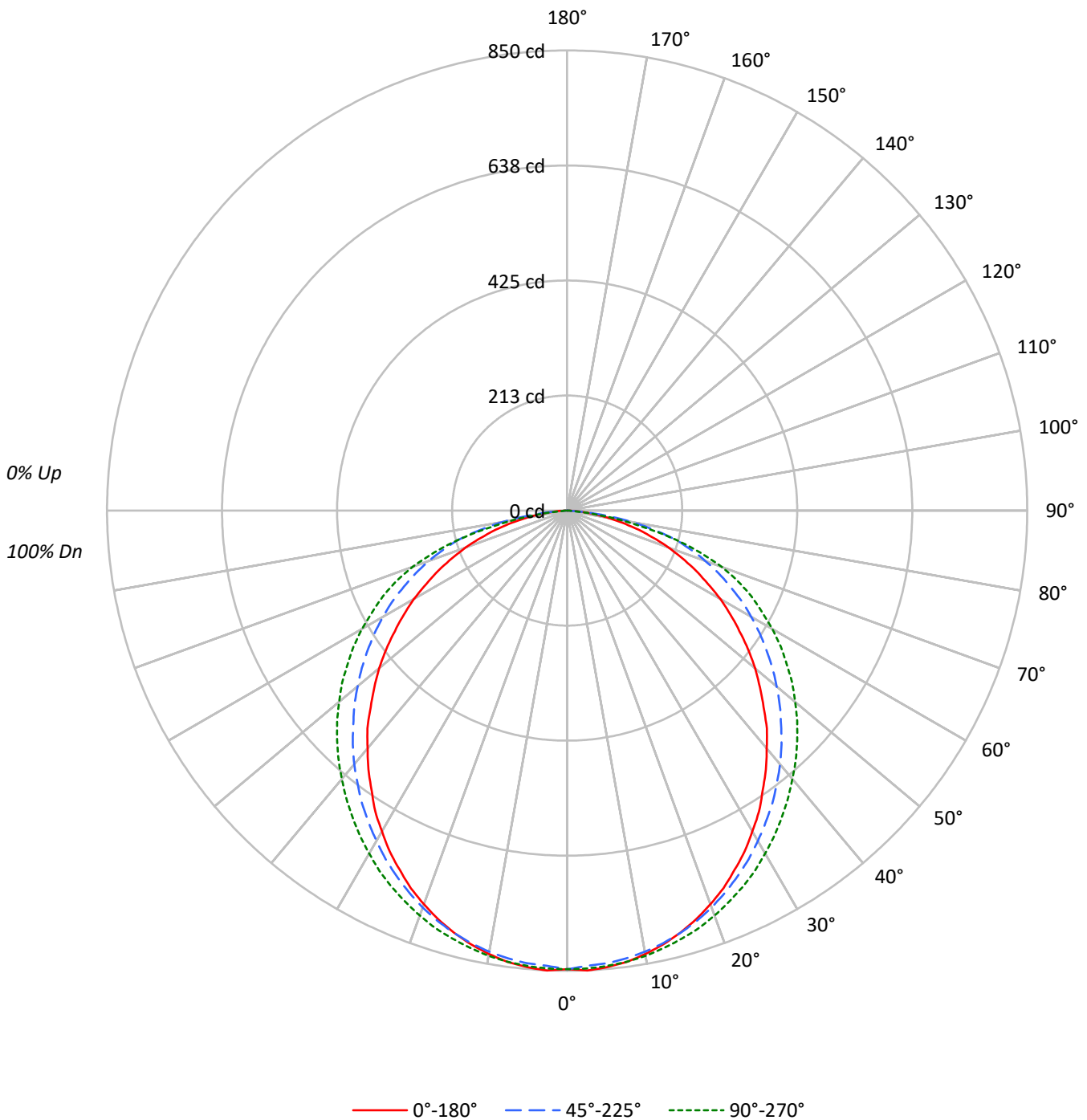
Lumens per Lamp: N/A
Luminaire Lumens: 2459.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.3
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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2280	2280	2280
5°	2287	2268	2281
10°	2273	2261	2282
15°	2249	2250	2281
20°	2216	2234	2280
25°	2173	2212	2278
30°	2126	2189	2273
35°	2070	2170	2271
40°	2015	2149	2275
45°	1953	2126	2287
50°	1896	2116	2303
55°	1824	2109	2323
60°	1759	2113	2355
65°	1669	2119	2392
70°	1566	2135	2390
75°	1419	2155	2161
80°	1164	1861	1537
85°	865	880	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	3.3
10°-20°	229.0	9.3
20°-30°	344.9	14.0
30°-40°	413.9	16.8
40°-50°	431.4	17.5
50°-60°	399.4	16.2
60°-70°	322.7	13.1
70°-80°	196.8	8.0
80°-90°	40.6	1.7
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°	654.1	26.6
0°-40°	1068.0	43.4
0°-60°	1898.9	77.2
0°-90°	2459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2459.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	847	844	840	846	844	80
15°	807	808	808	819	819	228
25°	732	736	745	764	767	337
35°	630	640	661	685	691	395
45°	513	529	559	590	601	397
55°	389	409	450	485	495	348
65°	262	288	333	366	376	259
75°	136	167	207	210	208	143
85°	28	42	28	16	12	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	847.1	847.1	847.1	847.1	847.1
2.5°	850.4	847.7	841.7	847.7	846.6
5°	846.6	844.4	839.5	845.5	844.4
7.5°	841.1	838.9	834.5	841.7	840.6
10°	831.8	830.7	827.4	835.6	835.1
12.5°	820.8	820.3	818.6	827.9	827.4
15°	807.1	807.7	807.7	818.6	818.6
17.5°	791.8	792.9	795.0	807.1	808.8
20°	773.7	775.9	780.2	793.9	796.1
22.5°	755.0	756.7	763.2	779.7	781.9
25°	732.0	736.4	745.1	763.8	767.1
27.5°	710.1	713.9	726.0	745.1	750.6
30°	684.3	690.3	704.6	725.4	731.4
32.5°	659.6	666.2	682.6	706.8	712.3
35°	630.0	639.9	660.7	684.8	691.4
37.5°	603.1	612.5	636.0	662.4	670.0
40°	573.5	585.0	611.9	639.9	647.5
42.5°	546.1	557.1	586.1	614.7	625.1
45°	513.2	528.6	558.7	590.0	600.9
47.5°	483.1	498.4	533.0	566.4	576.3
50°	452.9	469.4	505.5	540.1	550.0
52.5°	421.6	439.2	478.1	512.7	524.2
55°	388.7	409.0	449.6	484.7	495.1
57.5°	357.5	378.3	421.6	457.3	467.7
60°	326.8	348.2	392.6	426.6	437.5
62.5°	292.8	318.0	364.1	397.5	405.7
65°	262.1	287.9	332.8	366.3	375.6
67.5°	229.7	257.7	302.7	333.4	342.1
70°	199.0	228.1	271.4	299.9	303.8
72.5°	166.1	195.7	239.6	257.7	257.7
75°	136.5	166.7	207.3	210.5	207.8
77.5°	104.2	137.6	163.9	157.4	150.8
80°	75.1	108.0	120.1	108.0	99.2
82.5°	50.4	78.4	72.4	57.6	51.0
85°	28.0	41.7	28.5	15.9	11.5
87.5°	10.4	9.3	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)