

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: P271902

Luminaire Tested: **14CZ2-29-UNV-L935-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: P271902
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-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

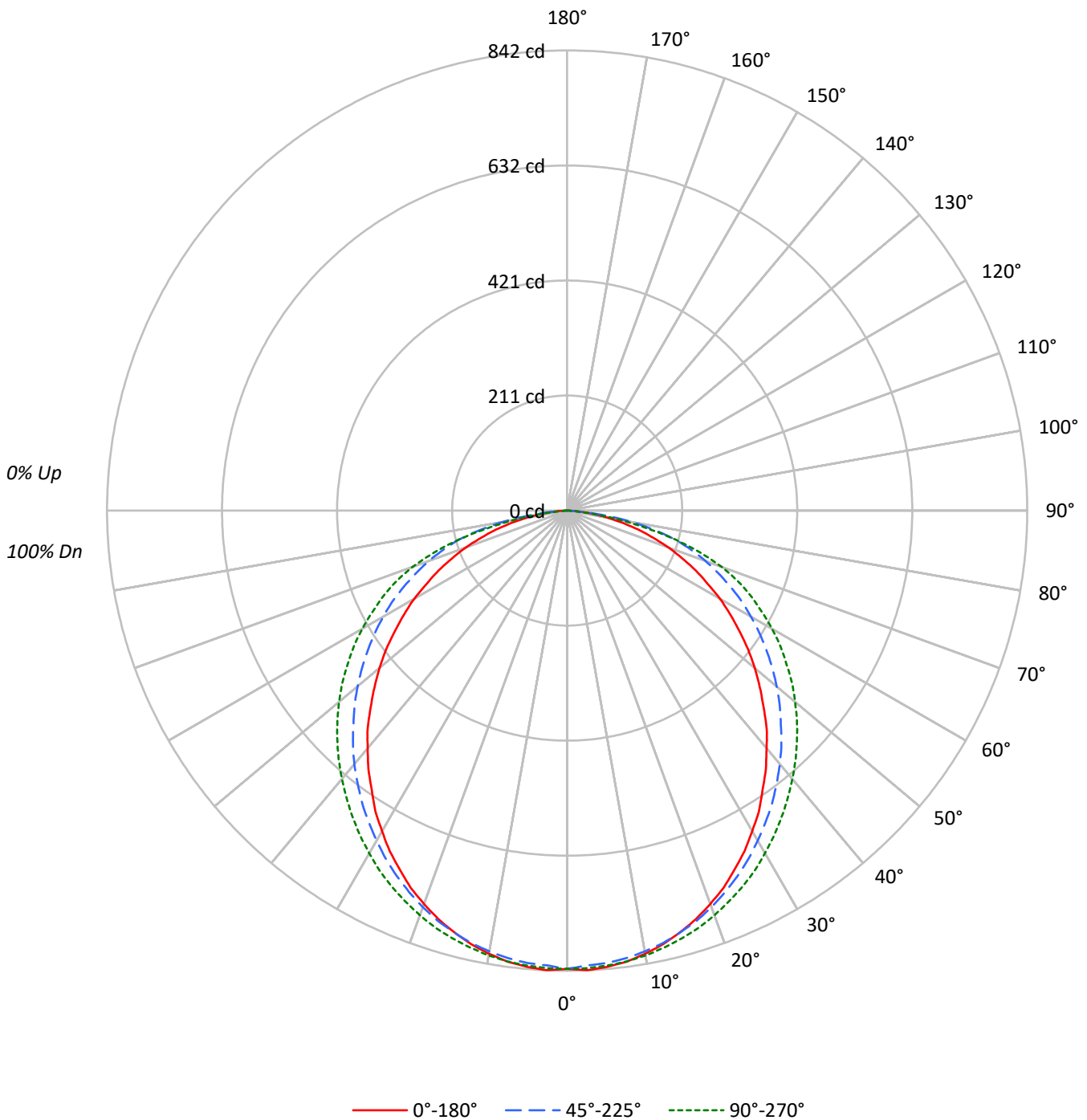
Lumens per Lamp: N/A
Luminaire Lumens: 2434.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2256	2256	2256
5°	2264	2244	2258
10°	2250	2238	2259
15°	2226	2227	2257
20°	2193	2212	2257
25°	2151	2190	2254
30°	2105	2167	2250
35°	2049	2148	2248
40°	1994	2128	2252
45°	1933	2105	2264
50°	1877	2095	2279
55°	1805	2088	2299
60°	1741	2091	2331
65°	1652	2097	2367
70°	1550	2114	2366
75°	1405	2133	2139
80°	1153	1843	1522
85°	855	871	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.3	3.3
10°-20°	226.7	9.3
20°-30°	341.4	14.0
30°-40°	409.7	16.8
40°-50°	427.1	17.5
50°-60°	395.4	16.2
60°-70°	319.4	13.1
70°-80°	194.8	8.0
80°-90°	40.2	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°	647.4	26.6
0°-40°	1057.2	43.4
0°-60°	1879.6	77.2
0°-90°	2434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	838	836	831	837	836	80
15°	799	799	799	810	810	225
25°	724	729	738	756	759	334
35°	624	633	654	678	684	391
45°	508	523	553	584	595	393
55°	385	405	445	480	490	345
65°	259	285	329	362	372	257
75°	135	165	205	208	206	142
85°	28	41	28	16	11	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	838.5	838.5	838.5	838.5	838.5
2.5°	841.8	839.1	833.1	839.1	838.0
5°	838.0	835.8	830.9	836.9	835.8
7.5°	832.6	830.4	826.0	833.1	832.0
10°	823.3	822.2	819.0	827.1	826.6
12.5°	812.5	811.9	810.3	819.5	819.0
15°	798.9	799.4	799.4	810.3	810.3
17.5°	783.7	784.8	787.0	798.9	800.5
20°	765.8	768.0	772.3	785.9	788.0
22.5°	747.3	749.0	755.5	771.8	773.9
25°	724.5	728.9	737.6	756.0	759.3
27.5°	702.8	706.6	718.6	737.6	743.0
30°	677.3	683.3	697.4	718.0	724.0
32.5°	652.9	659.4	675.7	699.6	705.0
35°	623.6	633.4	654.0	677.9	684.4
37.5°	597.0	606.2	629.6	655.6	663.2
40°	567.7	579.1	605.7	633.4	641.0
42.5°	540.6	551.4	580.2	608.4	618.7
45°	508.0	523.2	553.0	584.0	594.8
47.5°	478.1	493.3	527.5	560.6	570.4
50°	448.3	464.6	500.4	534.6	544.4
52.5°	417.4	434.7	473.3	507.5	518.9
55°	384.8	404.9	445.0	479.8	490.1
57.5°	353.9	374.5	417.4	452.6	463.0
60°	323.5	344.6	388.6	422.2	433.1
62.5°	289.8	314.8	360.4	393.5	401.6
65°	259.4	284.9	329.4	362.5	371.8
67.5°	227.4	255.1	299.6	330.0	338.7
70°	197.0	225.8	268.7	296.9	300.7
72.5°	164.4	193.8	237.2	255.1	255.1
75°	135.1	165.0	205.2	208.4	205.7
77.5°	103.1	136.2	162.3	155.8	149.3
80°	74.4	106.9	118.9	106.9	98.2
82.5°	49.9	77.6	71.6	57.0	50.5
85°	27.7	41.2	28.2	15.7	11.4
87.5°	10.3	9.2	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)