

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: P294793

Luminaire Tested: **14CZ2-25-HRP-UNV-L940-CD1-U**

Issue Date: 12/2/2019

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: P294793
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-25-HRP-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

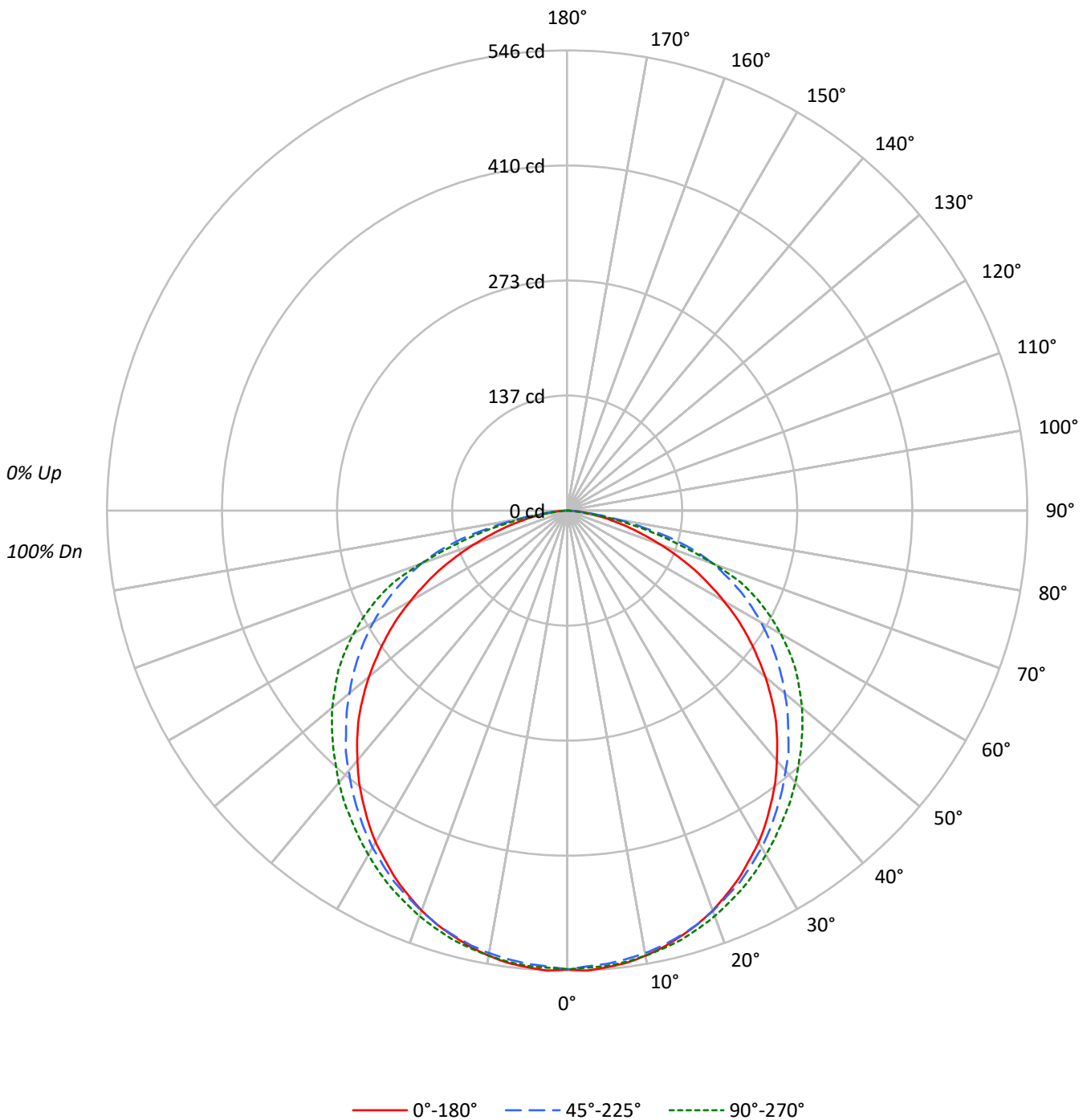
Lumens per Lamp: N/A
Luminaire Lumens: 1602.8 lumens
Efficiency: N/A
Efficacy: 78.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1465	1465	1465
5°	1469	1458	1465
10°	1465	1457	1465
15°	1456	1453	1467
20°	1446	1448	1466
25°	1431	1443	1466
30°	1413	1435	1466
35°	1387	1424	1468
40°	1360	1416	1480
45°	1331	1412	1496
50°	1285	1412	1523
55°	1230	1419	1556
60°	1156	1429	1576
65°	1065	1444	1585
70°	928	1448	1459
75°	765	1346	1179
80°	601	969	789
85°	466	374	185



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	3.2
10°-20°	147.9	9.2
20°-30°	224.6	14.0
30°-40°	272.1	17.0
40°-50°	286.7	17.9
50°-60°	267.7	16.7
60°-70°	213.9	13.3
70°-80°	117.7	7.3
80°-90°	20.8	1.3
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°	423.9	26.5
0°-40°	696.0	43.4
0°-60°	1250.4	78.0
0°-90°	1602.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1602.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	544	544	544	544	544	
5°	544	542	540	543	542	52
15°	523	523	522	527	527	148
25°	482	483	486	493	494	222
35°	422	426	433	444	447	264
45°	350	356	371	388	393	269
55°	262	275	302	324	332	234
65°	167	188	227	245	249	165
75°	74	105	130	116	113	79
85°	15	19	12	8	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	544.3	544.3	544.3	544.3	544.3
2.5°	546.3	544.8	541.3	544.3	542.8
5°	543.8	542.3	539.8	543.3	542.3
7.5°	541.3	539.3	536.8	540.8	539.8
10°	536.3	534.7	533.2	536.8	536.3
12.5°	530.2	529.7	528.2	532.2	531.7
15°	522.6	522.6	521.6	526.7	526.7
17.5°	514.6	514.1	514.6	520.1	519.6
20°	505.0	505.0	505.5	512.1	512.1
22.5°	493.4	493.9	495.4	503.5	503.0
25°	481.8	482.8	485.9	492.9	493.9
27.5°	467.7	470.2	473.8	482.3	483.3
30°	454.6	456.1	461.7	469.7	471.7
32.5°	439.0	442.0	448.1	457.1	459.6
35°	422.3	426.4	433.4	444.5	447.0
37.5°	405.7	409.2	418.8	430.4	434.9
40°	387.1	393.1	403.2	416.3	421.3
42.5°	368.9	375.0	388.6	402.2	406.7
45°	349.8	356.3	370.9	387.6	393.1
47.5°	328.6	336.2	354.8	372.5	378.5
50°	306.9	316.5	337.2	356.8	363.9
52.5°	284.3	296.4	320.0	340.7	347.3
55°	262.1	275.2	302.4	323.6	331.6
57.5°	239.4	253.5	284.3	308.4	313.0
60°	214.7	231.8	265.6	286.8	292.8
62.5°	190.5	210.2	246.5	266.6	271.7
65°	167.3	188.5	226.8	245.4	249.0
67.5°	142.1	167.3	205.1	222.3	223.3
70°	117.9	147.2	184.0	192.0	185.5
72.5°	94.2	125.5	159.3	152.7	147.2
75°	73.6	105.3	129.5	116.4	113.4
77.5°	54.4	86.2	92.7	85.7	80.1
80°	38.8	68.0	62.5	53.4	50.9
82.5°	26.7	42.8	34.3	26.7	23.2
85°	15.1	19.2	12.1	7.6	6.0
87.5°	6.6	4.5	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)