

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: P475360

Luminaire Tested: **14CZ2-25-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475360
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-25-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

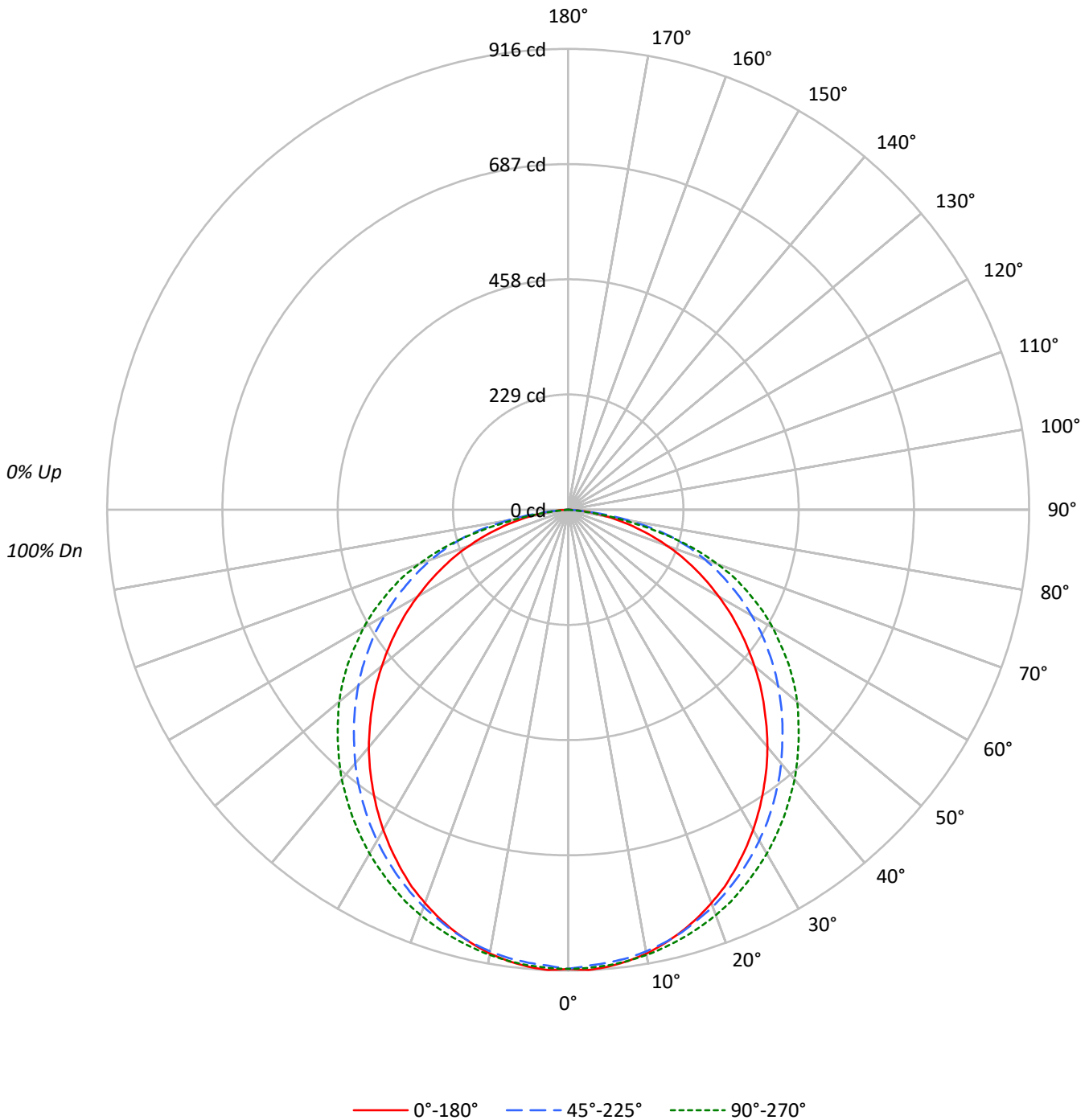
Lumens per Lamp: N/A
Luminaire Lumens: 2630.9 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19
Input Voltage (V): 120
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	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
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	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	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2456	2456	2456
5°	2463	2442	2456
10°	2448	2436	2455
15°	2420	2424	2454
20°	2383	2405	2456
25°	2337	2383	2453
30°	2284	2359	2453
35°	2224	2335	2453
40°	2164	2313	2459
45°	2093	2291	2464
50°	2022	2280	2487
55°	1946	2270	2508
60°	1859	2267	2526
65°	1765	2262	2531
70°	1644	2275	2483
75°	1457	2245	2227
80°	1223	1878	1516
85°	858	735	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	3.3
10°-20°	246.5	9.4
20°-30°	371.4	14.1
30°-40°	445.8	16.9
40°-50°	464.1	17.6
50°-60°	428.8	16.3
60°-70°	343.4	13.1
70°-80°	205.5	7.8
80°-90°	39.2	1.5
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°	704.2	26.8
0°-40°	1149.9	43.7
0°-60°	2042.8	77.6
0°-90°	2630.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2630.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	912	910	904	910	909	87
15°	869	869	870	881	881	245
25°	787	792	802	823	826	362
35°	677	687	711	739	747	424
45°	550	566	602	638	647	425
55°	415	437	484	521	535	371
65°	277	306	355	390	398	275
75°	140	175	216	219	214	150
85°	28	40	24	10	6	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	912.7	912.7	912.7	912.7	912.7
2.5°	915.8	913.2	907.4	913.2	911.8
5°	911.8	909.6	903.9	910.5	909.2
7.5°	905.2	903.5	899.1	906.1	904.8
10°	896.0	894.6	891.6	899.5	898.6
12.5°	883.2	883.6	881.9	891.6	890.7
15°	868.6	868.6	870.0	881.0	881.0
17.5°	851.5	852.3	855.0	869.5	870.0
20°	832.1	834.3	840.0	855.0	857.6
22.5°	811.4	814.0	821.9	839.6	843.5
25°	787.1	791.5	802.5	822.8	826.3
27.5°	761.6	768.2	781.8	803.9	808.3
30°	735.1	742.2	759.3	783.1	789.3
32.5°	706.5	715.7	736.4	761.6	768.6
35°	676.9	687.1	710.9	739.1	746.6
37.5°	647.4	658.4	685.3	715.7	723.2
40°	616.1	628.9	658.4	689.7	699.9
42.5°	583.1	597.2	629.8	664.2	673.9
45°	550.0	566.3	602.0	637.7	647.4
47.5°	517.8	534.6	573.4	610.4	620.5
50°	483.0	502.4	544.7	581.3	594.1
52.5°	449.1	470.7	515.2	552.2	565.0
55°	414.7	437.2	483.9	521.4	534.6
57.5°	381.2	405.0	454.4	491.4	500.7
60°	345.5	371.5	421.3	458.8	469.4
62.5°	312.0	338.9	389.1	425.3	435.4
65°	277.2	305.9	355.2	390.0	397.5
67.5°	244.6	273.2	323.0	353.0	360.5
70°	208.9	240.6	289.1	314.7	315.6
72.5°	175.0	207.1	254.3	270.6	268.4
75°	140.1	175.4	215.9	219.0	214.2
77.5°	108.9	144.1	171.9	162.2	152.5
80°	78.9	113.3	121.2	106.2	97.8
82.5°	52.0	79.3	73.2	52.4	45.0
85°	27.8	40.5	23.8	9.7	5.7
87.5°	10.6	7.1	2.6	2.2	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)