

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: P475468

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475468
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-25-HRP-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

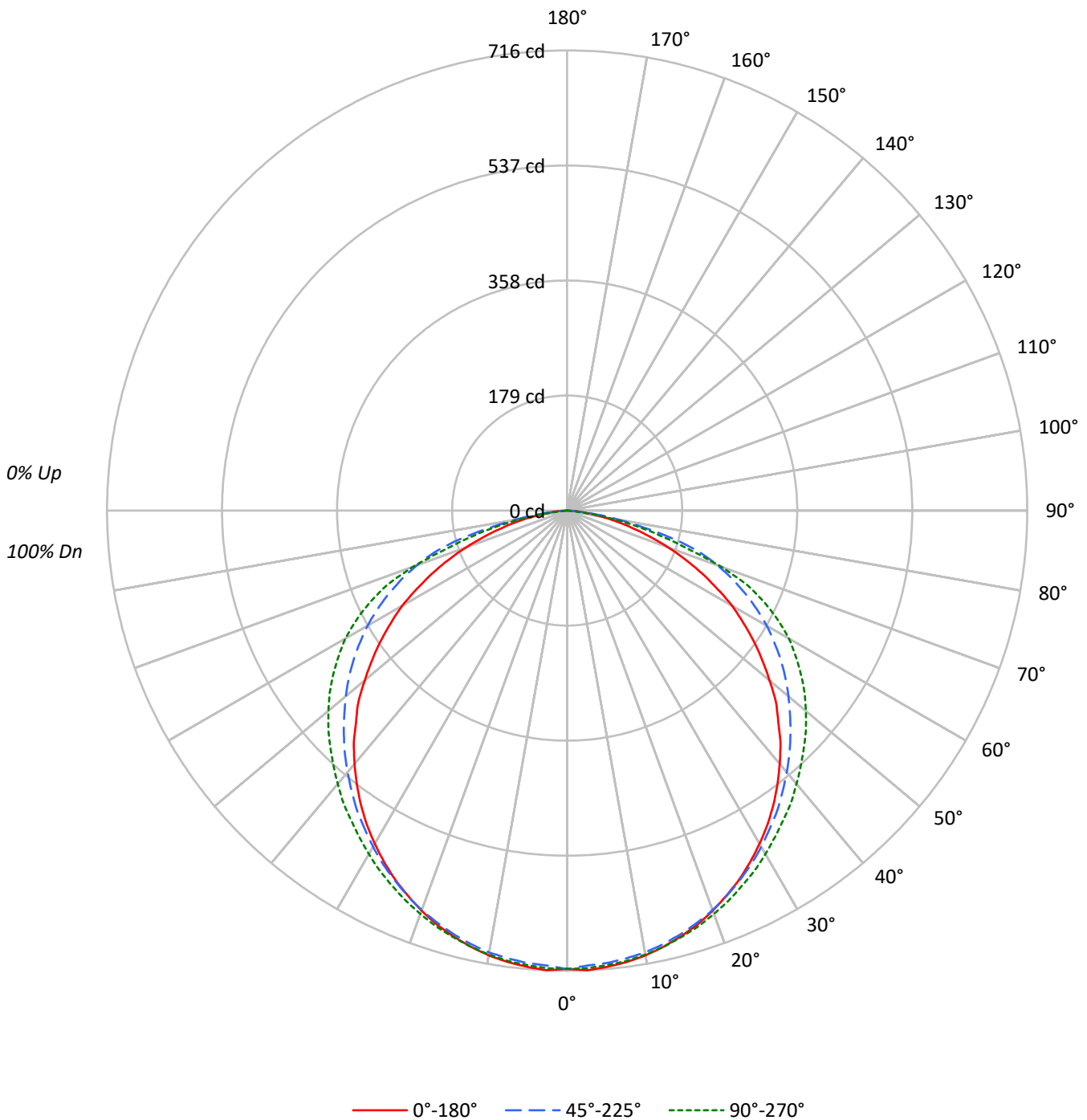
Lumens per Lamp: N/A
Luminaire Lumens: 2131.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	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	70	64	87	77	69	63	74	68	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	39	51	44	39	50	43	39	37
7	64	50	41	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	41	33	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°	1919	1919	1919
5°	1925	1909	1918
10°	1920	1908	1917
15°	1910	1901	1914
20°	1897	1894	1912
25°	1881	1885	1913
30°	1861	1877	1918
35°	1837	1872	1928
40°	1807	1867	1951
45°	1768	1870	1983
50°	1721	1881	2030
55°	1664	1905	2084
60°	1597	1930	2146
65°	1475	1948	2158
70°	1315	1957	1998
75°	1101	1813	1553
80°	837	1274	1020
85°	590	448	142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	3.2
10°-20°	193.4	9.1
20°-30°	294.0	13.8
30°-40°	358.0	16.8
40°-50°	380.3	17.8
50°-60°	359.7	16.9
60°-70°	291.5	13.7
70°-80°	159.8	7.5
80°-90°	26.7	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°	555.0	26.0
0°-40°	913.0	42.8
0°-60°	1653.0	77.6
0°-90°	2131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	713	711	707	711	710	68
15°	686	684	682	688	687	193
25°	634	634	635	644	644	292
35°	559	561	570	584	587	350
45°	464	472	492	514	521	359
55°	355	370	406	436	444	317
65°	232	258	306	333	339	229
75°	106	146	174	154	149	113
85°	19	25	14	7	5	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	713.2	713.2	713.2	713.2	713.2
2.5°	715.9	713.2	708.6	713.2	712.6
5°	712.6	711.3	706.7	711.3	709.9
7.5°	708.6	707.3	702.7	708.0	706.7
10°	702.7	701.4	698.1	702.7	701.4
12.5°	694.8	694.2	690.9	696.1	694.8
15°	685.6	684.3	682.3	687.6	686.9
17.5°	675.1	673.8	672.4	679.0	678.4
20°	662.6	661.9	661.3	668.5	667.8
22.5°	648.1	648.1	648.8	656.7	656.7
25°	633.6	633.6	634.9	643.5	644.2
27.5°	616.5	617.8	620.5	629.7	631.6
30°	598.8	600.1	604.0	614.5	617.2
32.5°	579.7	581.6	586.9	599.4	602.0
35°	559.3	561.2	569.8	583.6	586.9
37.5°	537.6	540.8	550.7	566.5	572.4
40°	514.5	519.8	531.6	548.7	555.3
42.5°	491.5	496.1	511.9	531.6	538.2
45°	464.5	471.8	491.5	513.9	521.1
47.5°	440.8	447.4	470.4	495.4	504.0
50°	411.2	421.1	449.4	477.0	484.9
52.5°	382.9	396.1	428.3	456.6	465.8
55°	354.6	370.4	406.0	435.6	444.1
57.5°	325.0	342.1	382.3	412.5	421.8
60°	296.7	315.2	358.6	389.5	398.7
62.5°	263.2	286.2	332.9	362.5	370.4
65°	231.6	257.9	306.0	332.9	338.9
67.5°	199.4	230.3	278.3	302.0	304.0
70°	167.1	202.0	248.7	263.2	254.0
72.5°	135.5	174.4	217.1	205.3	194.8
75°	105.9	146.1	174.4	154.0	149.4
77.5°	78.3	119.8	121.7	111.9	108.6
80°	54.0	92.8	82.2	71.1	65.8
82.5°	34.9	57.2	45.4	33.6	30.3
85°	19.1	25.0	14.5	7.2	4.6
87.5°	7.2	4.6	2.0	2.0	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)