

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: P475486

Luminaire Tested: **14CZ2-25-SQR-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475486
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-25-SQR-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

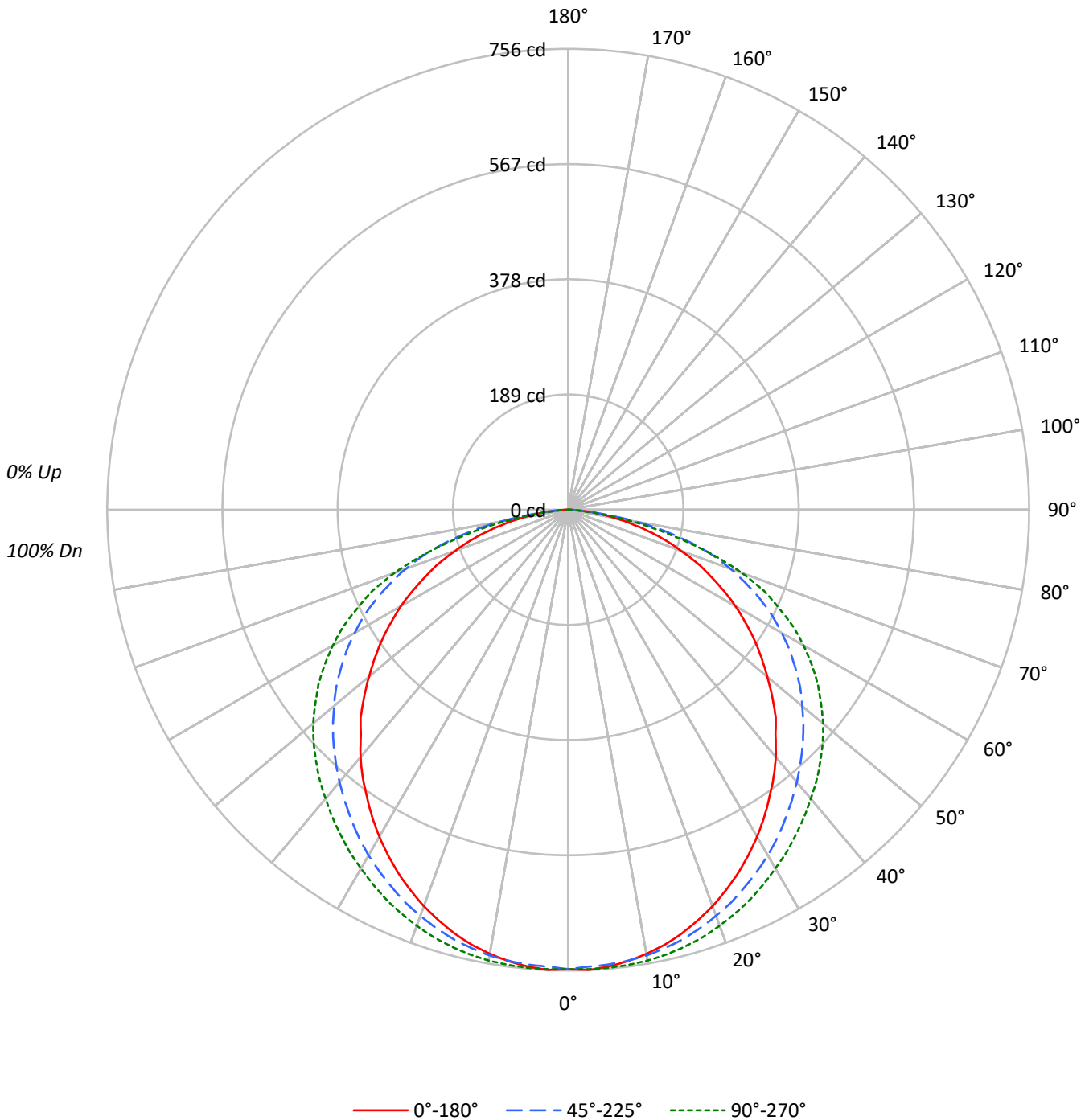
Lumens per Lamp: N/A
Luminaire Lumens: 2366.8 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.43
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74		81	76	72		77	74	70	68
3	89	78	69	63	86	76	68	62	73	67	61		70	65	60		68	63	59	57
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		49	43	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24		36	29	24		35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2028	2028	2028
5°	2033	2024	2038
10°	2021	2029	2052
15°	2005	2031	2067
20°	1983	2030	2080
25°	1955	2030	2095
30°	1925	2035	2112
35°	1890	2037	2138
40°	1861	2049	2174
45°	1831	2070	2225
50°	1785	2098	2286
55°	1749	2135	2345
60°	1705	2176	2399
65°	1638	2213	2425
70°	1551	2230	2382
75°	1417	2154	2057
80°	1192	1760	1533
85°	868	886	577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	3.0
10°-20°	206.3	8.7
20°-30°	315.4	13.3
30°-40°	387.2	16.4
40°-50°	416.4	17.6
50°-60°	399.7	16.9
60°-70°	331.1	14.0
70°-80°	198.5	8.4
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°	593.3	25.1
0°-40°	980.5	41.4
0°-60°	1796.6	75.9
0°-90°	2366.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2366.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	752	751	749	755	754	71
15°	720	723	729	740	742	203
25°	658	669	684	702	706	303
35°	575	595	620	644	651	360
45°	481	507	544	574	585	370
55°	373	408	455	488	500	333
65°	257	299	348	375	381	255
75°	136	178	207	202	198	144
85°	28	41	29	19	19	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	753.8	753.8	753.8	753.8	753.8
2.5°	755.8	753.8	750.5	755.8	754.5
5°	752.5	751.1	749.1	755.2	754.5
7.5°	747.1	747.1	746.5	753.8	753.2
10°	739.8	741.1	742.5	751.1	751.1
12.5°	731.1	732.4	736.4	746.5	747.1
15°	719.7	723.1	729.1	740.5	741.8
17.5°	706.4	711.7	719.7	733.1	735.1
20°	692.3	698.4	709.0	723.7	726.4
22.5°	675.6	684.3	697.7	713.1	716.4
25°	658.3	668.9	683.7	701.7	705.7
27.5°	639.5	652.2	669.6	688.3	693.0
30°	619.5	634.2	654.9	675.0	679.6
32.5°	598.1	615.5	638.2	660.3	666.3
35°	575.4	594.8	620.2	644.2	650.9
37.5°	553.3	574.1	602.1	628.2	635.5
40°	529.9	552.0	583.4	610.8	618.8
42.5°	503.2	529.9	564.0	593.4	602.8
45°	481.2	506.6	544.0	574.1	584.7
47.5°	453.8	483.2	523.3	555.3	566.0
50°	426.4	459.8	501.2	534.6	546.0
52.5°	399.6	433.7	479.8	512.6	522.6
55°	372.9	408.3	455.1	488.5	499.9
57.5°	344.8	383.6	431.0	464.5	473.8
60°	316.8	355.5	404.3	436.4	445.7
62.5°	287.4	328.8	377.6	407.0	416.3
65°	257.3	299.4	347.5	374.9	380.9
67.5°	229.2	272.0	315.4	340.8	346.8
70°	197.1	242.6	283.4	302.1	302.7
72.5°	167.7	209.8	248.6	253.9	252.6
75°	136.3	177.8	207.2	202.5	197.8
77.5°	105.6	147.7	163.1	149.7	146.4
80°	76.9	114.9	113.6	100.9	98.9
82.5°	52.8	79.5	65.5	53.5	49.5
85°	28.1	40.8	28.7	19.4	18.7
87.5°	10.7	10.0	6.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)