

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: P474562

Luminaire Tested: **24CZ2-35-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474562
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

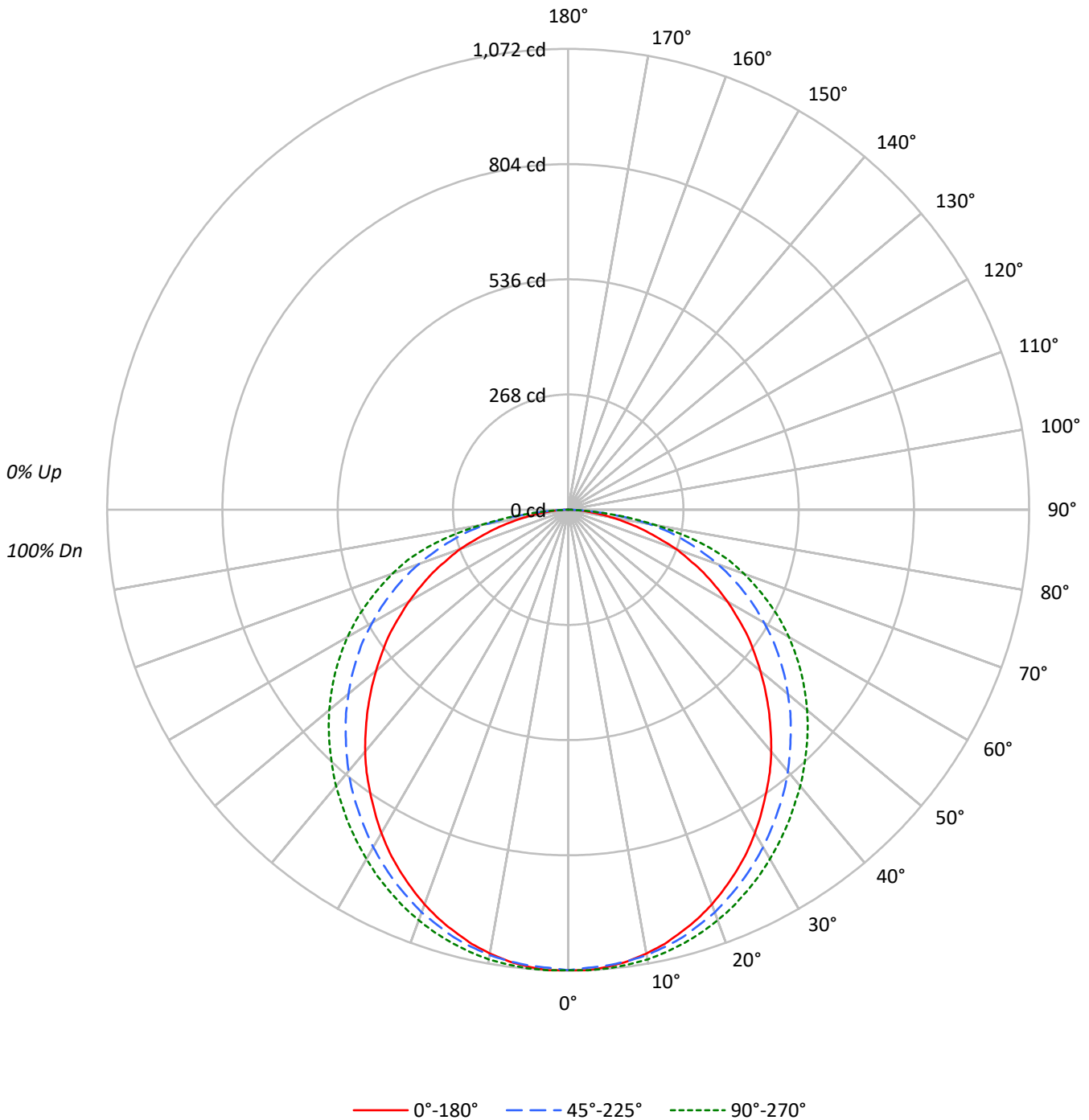
Lumens per Lamp: N/A
Luminaire Lumens: 3261.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
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	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	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	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2883	2883	2883
5°	2882	2874	2894
10°	2864	2874	2903
15°	2833	2868	2907
20°	2798	2854	2911
25°	2752	2834	2911
30°	2699	2817	2916
35°	2637	2800	2927
40°	2581	2791	2950
45°	2510	2784	2982
50°	2443	2792	3036
55°	2386	2811	3104
60°	2305	2832	3191
65°	2213	2866	3287
70°	2098	2906	3419
75°	1880	2947	3532
80°	1582	2955	3205
85°	1173	2235	2106



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	3.1
10°-20°	290.9	8.9
20°-30°	440.4	13.5
30°-40°	532.7	16.3
40°-50°	562.3	17.2
50°-60°	530.3	16.3
60°-70°	437.2	13.4
70°-80°	286.8	8.8
80°-90°	78.9	2.4
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°	832.8	25.5
0°-40°	1365.6	41.9
0°-60°	2458.2	75.4
0°-90°	3261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3261.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1067	1067	1064	1071	1071	101
15°	1017	1023	1030	1042	1044	287
25°	927	938	954	974	980	427
35°	803	824	852	882	891	503
45°	660	689	732	770	784	509
55°	508	544	599	644	662	453
65°	348	389	450	498	516	343
75°	181	227	283	328	340	191
85°	38	66	72	70	68	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.2	1071.2	1071.2	1071.2	1071.2
2.5°	1072.2	1071.2	1066.5	1072.7	1072.2
5°	1067.0	1067.0	1063.9	1071.2	1071.2
7.5°	1059.7	1060.2	1059.2	1067.5	1067.5
10°	1048.2	1050.3	1051.9	1061.3	1062.3
12.5°	1034.7	1038.3	1041.5	1052.9	1054.0
15°	1017.0	1022.7	1029.5	1041.5	1043.5
17.5°	998.7	1005.5	1012.8	1028.4	1031.0
20°	976.9	984.7	996.7	1012.3	1016.5
22.5°	952.4	963.3	975.8	994.6	999.8
25°	926.8	938.3	954.5	974.3	980.5
27.5°	899.2	912.8	931.0	953.9	960.7
30°	868.5	884.1	906.5	931.0	938.3
32.5°	836.2	854.4	879.4	906.5	914.9
35°	802.8	823.7	852.3	881.5	890.9
37.5°	770.0	790.9	824.7	855.5	864.3
40°	734.6	757.5	794.5	827.3	839.8
42.5°	697.1	724.2	763.3	799.7	811.7
45°	659.6	689.3	731.5	770.5	783.6
47.5°	621.5	654.4	700.7	740.3	755.4
50°	583.5	618.4	666.9	709.6	725.2
52.5°	545.0	581.4	634.0	679.4	693.4
55°	508.5	544.4	599.1	643.9	661.7
57.5°	466.3	506.9	564.8	610.1	627.3
60°	428.3	467.8	526.2	574.1	592.9
62.5°	387.1	427.7	489.2	537.1	555.4
65°	347.5	389.2	450.1	498.1	516.3
67.5°	304.8	348.5	411.1	457.4	475.1
70°	266.7	307.9	369.4	416.8	434.5
72.5°	220.4	267.3	326.1	373.0	392.3
75°	180.8	227.2	283.4	328.2	339.7
77.5°	139.1	185.5	241.2	270.4	278.2
80°	102.1	145.9	190.7	206.3	206.8
82.5°	68.8	107.3	132.9	140.7	139.6
85°	38.0	65.6	72.4	70.3	68.2
87.5°	15.6	21.9	17.7	12.5	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)