

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: P475255

Luminaire Tested: **22CZ2-24-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475255
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24-SQR-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

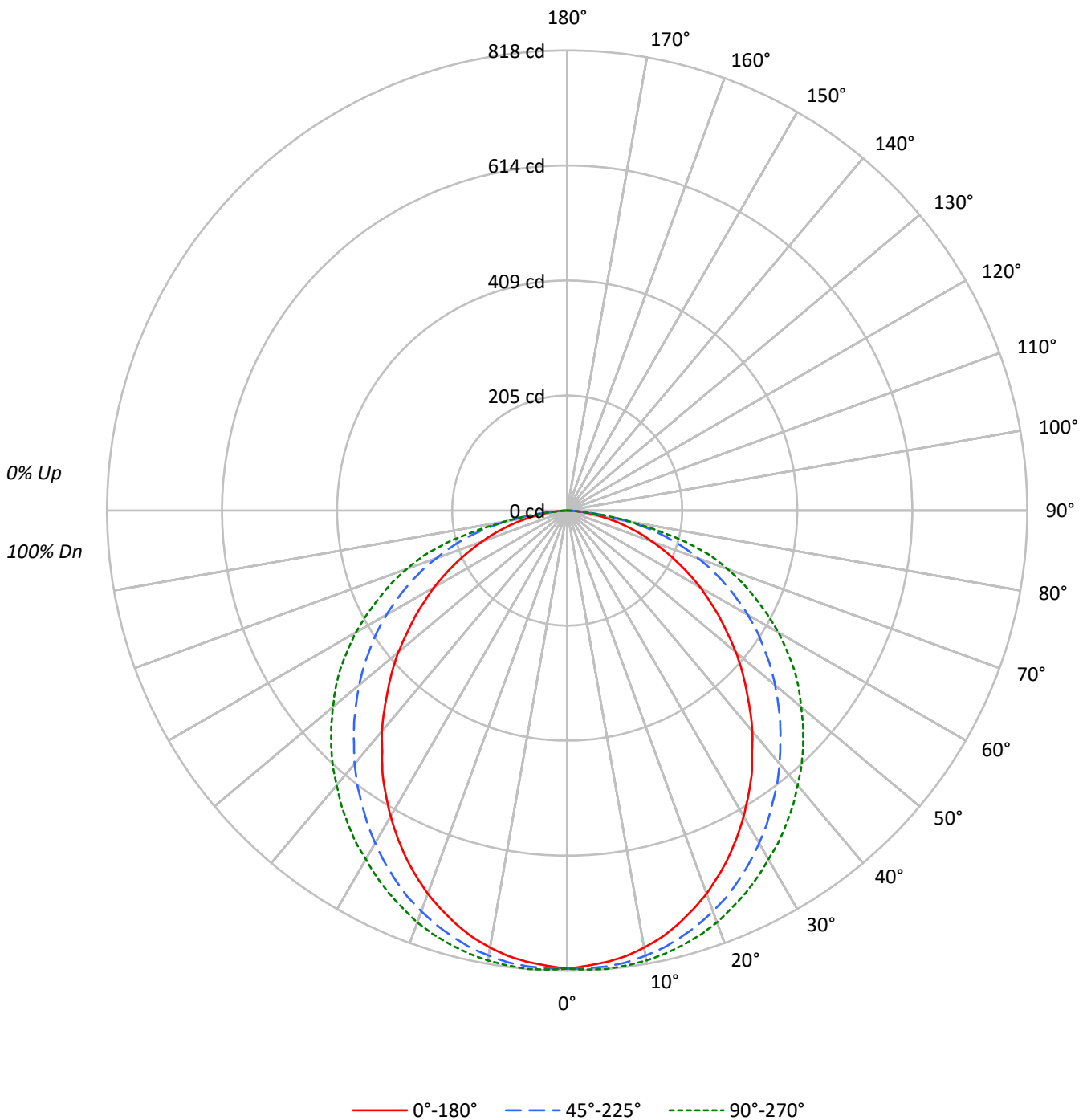
Lumens per Lamp: N/A
Luminaire Lumens: 2331.4 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 18.5
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	95	106	101	97	94	97	94	91	93	91	88	90	87	85	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	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2192	2192	2192
5°	2176	2197	2209
10°	2156	2195	2219
15°	2121	2186	2226
20°	2075	2171	2231
25°	2017	2148	2227
30°	1950	2121	2224
35°	1879	2090	2232
40°	1800	2064	2239
45°	1714	2038	2257
50°	1640	2020	2274
55°	1552	2004	2311
60°	1471	1996	2335
65°	1373	1980	2353
70°	1262	1950	2386
75°	1140	1899	2301
80°	978	1681	1733
85°	787	991	787



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	3.3
10°-20°	220.7	9.5
20°-30°	331.6	14.2
30°-40°	395.4	17.0
40°-50°	408.8	17.5
50°-60°	375.9	16.1
60°-70°	299.2	12.8
70°-80°	182.8	7.8
80°-90°	39.7	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°	629.5	27.0
0°-40°	1024.9	44.0
0°-60°	1809.6	77.6
0°-90°	2331.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	806	808	813	817	818	76
15°	761	770	784	796	799	214
25°	679	696	724	744	750	313
35°	572	596	636	670	679	357
45°	450	482	536	579	593	348
55°	331	367	427	476	492	296
65°	216	252	311	354	370	214
75°	110	142	183	215	221	117
85°	26	31	32	28	26	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.4	814.4	814.4	814.4	814.4
2.5°	810.0	811.1	814.4	816.7	816.7
5°	805.5	807.8	813.3	816.7	817.8
7.5°	798.9	802.2	810.0	814.4	815.6
10°	789.0	793.4	803.3	810.0	812.2
12.5°	776.8	783.4	795.6	804.4	806.6
15°	761.3	770.2	784.5	795.6	798.9
17.5°	743.6	754.6	772.4	785.7	790.1
20°	724.7	735.9	758.0	773.5	779.0
22.5°	702.7	717.0	742.5	760.2	764.7
25°	679.4	696.0	723.6	743.6	750.2
27.5°	654.0	673.9	703.8	728.2	733.7
30°	627.4	648.5	682.7	709.3	715.9
32.5°	599.7	624.1	660.6	690.5	699.4
35°	572.1	596.4	636.2	669.5	679.4
37.5°	540.0	568.7	613.1	647.4	659.5
40°	512.3	540.0	587.6	625.2	637.4
42.5°	481.3	511.2	561.0	601.9	616.4
45°	450.3	482.4	535.6	578.8	593.1
47.5°	421.6	453.6	509.0	554.4	568.7
50°	391.7	424.9	482.4	529.0	543.3
52.5°	359.6	396.1	455.9	502.4	519.0
55°	330.8	367.3	427.1	475.8	492.5
57.5°	301.0	338.6	400.6	447.0	462.6
60°	273.3	309.8	370.8	416.1	433.8
62.5°	243.4	281.0	340.8	385.1	401.7
65°	215.7	252.4	310.9	354.1	369.5
67.5°	188.1	224.7	279.9	320.9	338.6
70°	160.4	197.0	247.8	287.7	303.2
72.5°	136.2	168.2	216.8	253.5	267.8
75°	109.6	141.7	182.6	214.6	221.3
77.5°	85.2	114.0	148.3	162.6	164.9
80°	63.1	85.2	108.5	111.8	111.8
82.5°	42.0	58.6	67.5	68.6	67.5
85°	25.5	31.0	32.1	27.7	25.5
87.5°	8.8	8.8	5.5	3.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)