

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: P474801

Luminaire Tested: **22CZ2-20VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474801
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20VHE-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

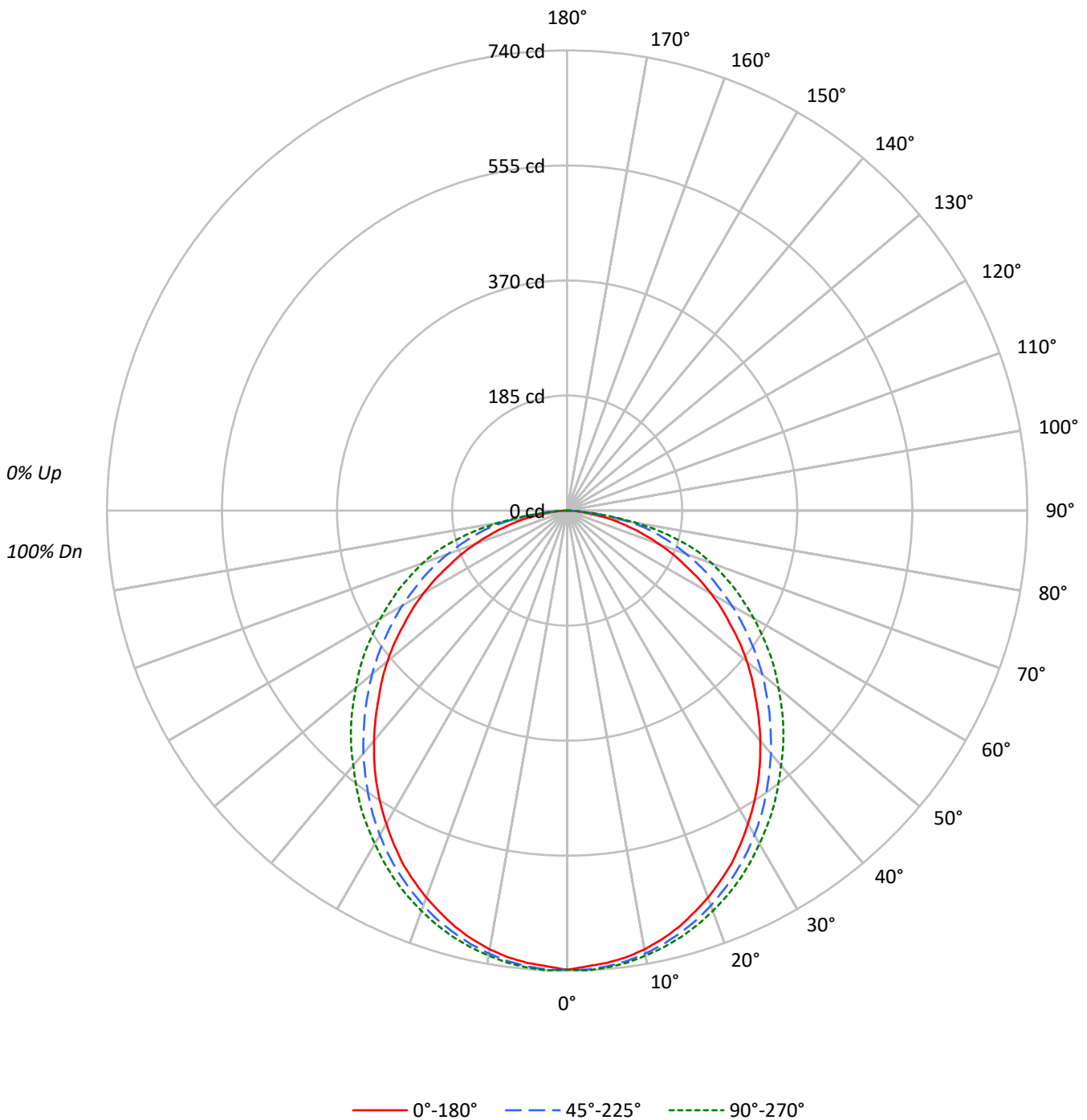
Lumens per Lamp: N/A
Luminaire Lumens: 2035.9 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
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	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1987	1987	1987
5°	1972	1987	1992
10°	1958	1976	1986
15°	1931	1958	1977
20°	1896	1936	1962
25°	1859	1906	1946
30°	1808	1872	1922
35°	1757	1832	1904
40°	1697	1791	1880
45°	1633	1751	1872
50°	1580	1715	1857
55°	1506	1677	1861
60°	1438	1648	1866
65°	1337	1628	1896
70°	1235	1604	1943
75°	1105	1597	1955
80°	927	1514	1706
85°	716	1037	969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	3.4
10°-20°	198.0	9.7
20°-30°	295.3	14.5
30°-40°	348.6	17.1
40°-50°	355.2	17.4
50°-60°	320.4	15.7
60°-70°	251.8	12.4
70°-80°	157.6	7.7
80°-90°	39.3	1.9
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°	563.0	27.7
0°-40°	911.6	44.8
0°-60°	1587.2	78.0
0°-90°	2035.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2035.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	730	732	736	738	738	69
15°	693	696	703	708	710	195
25°	626	631	642	652	655	288
35°	535	542	558	573	580	334
45°	429	438	460	482	492	332
55°	321	331	358	385	397	288
65°	210	223	256	284	298	209
75°	106	122	154	181	188	113
85°	23	30	34	34	31	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	738.3	738.3	738.3	738.3	738.3
2.5°	733.6	735.3	738.8	740.1	740.1
5°	730.2	731.9	735.7	737.5	737.5
7.5°	724.6	726.3	731.0	733.2	733.6
10°	716.4	718.5	723.3	726.7	726.7
12.5°	706.1	708.2	714.2	718.5	719.0
15°	693.2	696.2	703.0	708.2	709.5
17.5°	678.1	682.8	690.6	697.0	698.3
20°	662.2	666.9	675.9	683.3	685.0
22.5°	644.5	648.8	659.6	668.6	670.8
25°	626.0	630.8	642.0	651.8	655.3
27.5°	604.1	609.7	623.0	634.2	637.6
30°	581.7	588.6	602.4	614.8	618.7
32.5°	558.9	565.4	580.9	594.2	599.4
35°	534.8	541.7	557.6	573.1	579.6
37.5°	509.4	516.3	533.5	551.2	557.2
40°	483.2	491.4	509.9	528.8	535.2
42.5°	456.5	465.1	484.5	505.6	514.2
45°	429.0	438.4	460.0	482.3	491.8
47.5°	404.0	411.8	434.1	458.7	467.7
50°	377.3	384.7	409.6	434.1	443.6
52.5°	350.2	357.1	383.8	409.6	421.2
55°	321.0	330.9	357.5	385.1	396.7
57.5°	295.2	304.2	331.7	359.7	370.9
60°	267.2	276.7	306.3	334.7	346.8
62.5°	239.2	249.6	279.7	310.2	321.4
65°	210.0	222.9	255.6	284.0	297.7
67.5°	185.0	197.5	229.8	259.4	271.5
70°	157.0	171.7	203.9	234.1	247.0
72.5°	130.8	145.4	178.6	208.7	221.6
75°	106.3	122.2	153.6	181.1	188.0
77.5°	82.6	97.7	129.1	145.0	152.3
80°	59.8	74.4	97.7	108.4	110.1
82.5°	40.4	52.9	66.3	69.3	67.6
85°	23.2	29.7	33.6	33.6	31.4
87.5°	9.5	9.5	8.2	5.2	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)