

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: P475350

Luminaire Tested: **14CZ2-20-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475350
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-20-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

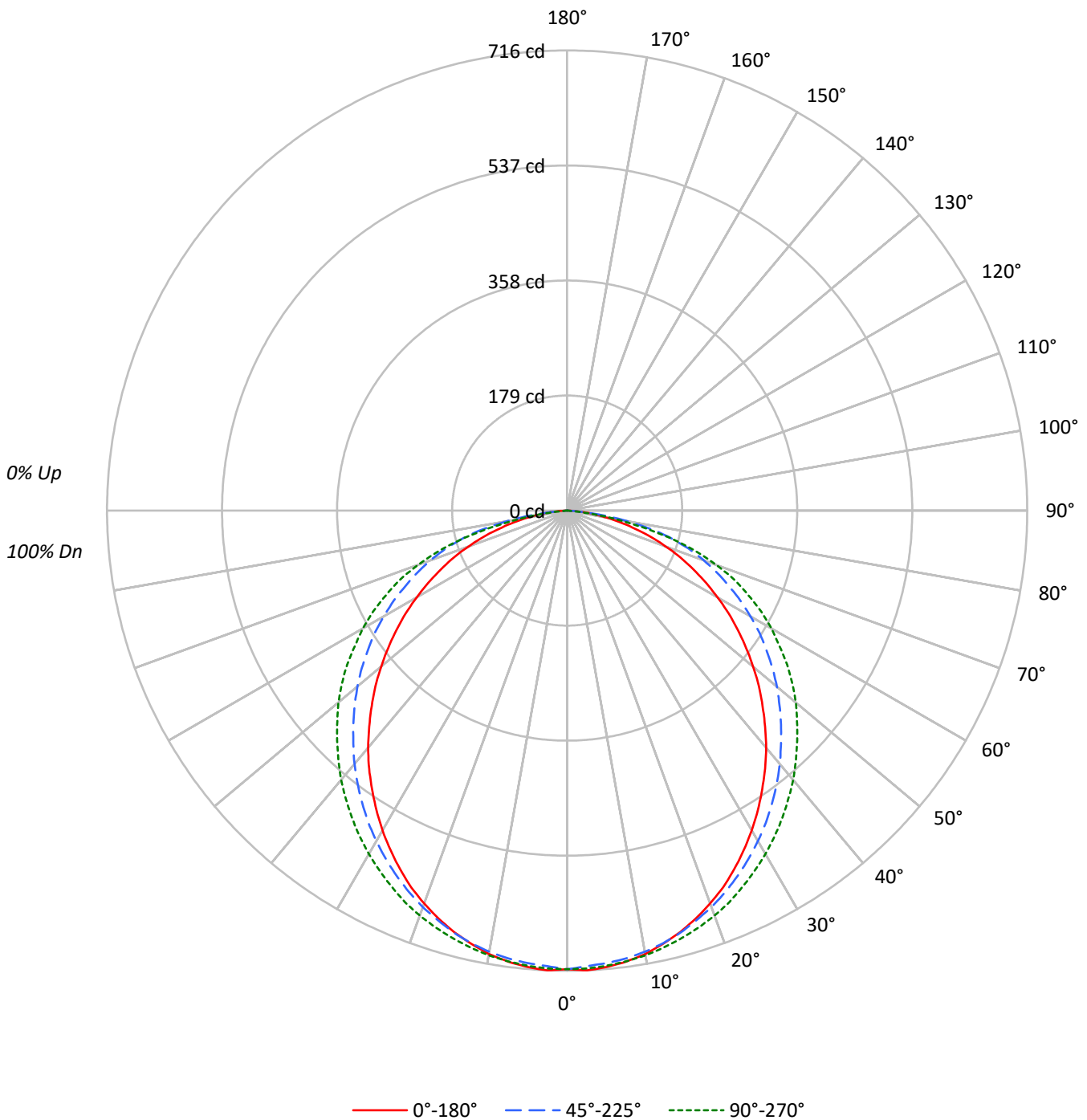
Lumens per Lamp: N/A
Luminaire Lumens: 2056.9 lumens
Efficiency: N/A
Efficacy: 131.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 15.6
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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	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	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1920	1920	1920
5°	1926	1909	1920
10°	1914	1905	1920
15°	1892	1895	1919
20°	1863	1881	1920
25°	1827	1863	1918
30°	1786	1845	1917
35°	1738	1826	1918
40°	1692	1808	1922
45°	1636	1791	1926
50°	1581	1783	1945
55°	1521	1775	1961
60°	1454	1773	1975
65°	1380	1768	1979
70°	1285	1778	1941
75°	1140	1755	1742
80°	956	1469	1185
85°	670	574	139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	3.3
10°-20°	192.7	9.4
20°-30°	290.3	14.1
30°-40°	348.5	16.9
40°-50°	362.8	17.6
50°-60°	335.3	16.3
60°-70°	268.5	13.1
70°-80°	160.7	7.8
80°-90°	30.6	1.5
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°	550.5	26.8
0°-40°	899.0	43.7
0°-60°	1597.1	77.6
0°-90°	2056.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2056.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	713	711	707	712	711	68
15°	679	679	680	689	689	191
25°	615	619	627	643	646	283
35°	529	537	556	578	584	331
45°	430	443	471	499	506	332
55°	324	342	378	408	418	290
65°	217	239	278	305	311	215
75°	110	137	169	171	168	117
85°	22	32	19	8	4	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	713.6	713.6	713.6	713.6	713.6
2.5°	716.0	713.9	709.4	713.9	712.9
5°	712.9	711.2	706.7	711.9	710.8
7.5°	707.7	706.3	702.9	708.4	707.4
10°	700.5	699.4	697.0	703.2	702.5
12.5°	690.5	690.8	689.5	697.0	696.3
15°	679.1	679.1	680.2	688.8	688.8
17.5°	665.7	666.4	668.4	679.8	680.2
20°	650.5	652.2	656.7	668.4	670.5
22.5°	634.3	636.4	642.6	656.4	659.5
25°	615.4	618.8	627.4	643.3	646.0
27.5°	595.4	600.6	611.2	628.5	631.9
30°	574.7	580.2	593.7	612.3	617.1
32.5°	552.3	559.6	575.8	595.4	600.9
35°	529.2	537.2	555.8	577.8	583.7
37.5°	506.2	514.8	535.8	559.6	565.4
40°	481.7	491.7	514.8	539.2	547.2
42.5°	455.8	466.9	492.4	519.2	526.8
45°	430.0	442.8	470.7	498.6	506.2
47.5°	404.9	417.9	448.3	477.2	485.1
50°	377.6	392.8	425.9	454.5	464.5
52.5°	351.1	368.0	402.8	431.7	441.7
55°	324.2	341.8	378.3	407.6	417.9
57.5°	298.0	316.6	355.2	384.2	391.4
60°	270.1	290.5	329.4	358.7	367.0
62.5°	243.9	265.0	304.2	332.5	340.4
65°	216.7	239.1	277.7	304.9	310.8
67.5°	191.2	213.6	252.6	276.0	281.8
70°	163.3	188.1	226.0	246.0	246.7
72.5°	136.8	161.9	198.8	211.6	209.8
75°	109.6	137.1	168.8	171.2	167.5
77.5°	85.1	112.7	134.4	126.8	119.2
80°	61.7	88.6	94.8	83.0	76.5
82.5°	40.7	62.0	57.2	41.0	35.1
85°	21.7	31.7	18.6	7.6	4.5
87.5°	8.3	5.5	2.1	1.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)