

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: P#

Luminaire Tested: **22CZ-LD5-20SE-S-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-20SE-S-UNV-L830-CD1-U  
Description: CRUZE 2x2 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

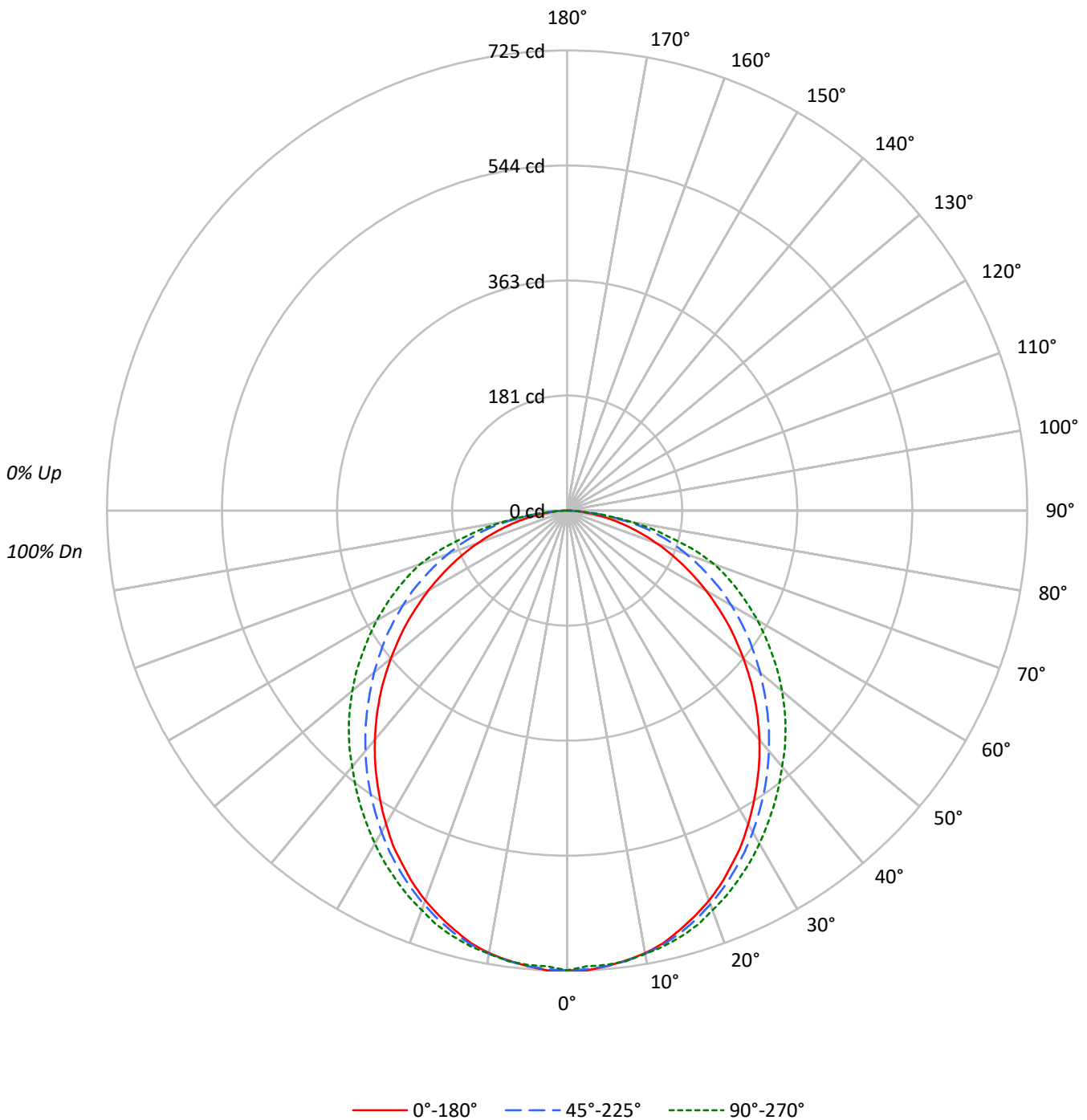
Lumens per Lamp: N/A  
Luminaire Lumens: 1986.6 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 17.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	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	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1949	1949	1949
5°	1938	1934	1932
10°	1918	1913	1920
15°	1881	1884	1910
20°	1838	1843	1884
25°	1783	1796	1858
30°	1723	1746	1830
35°	1656	1693	1802
40°	1589	1639	1776
45°	1515	1584	1764
50°	1433	1532	1746
55°	1350	1484	1726
60°	1253	1432	1716
65°	1152	1377	1707
70°	1036	1314	1702
75°	895	1232	1513
80°	726	1034	1222
85°	487	603	617



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.4	3.4
10°-20°	194.3	9.8
20°-30°	288.6	14.5
30°-40°	339.7	17.1
40°-50°	346.3	17.4
50°-60°	312.3	15.7
60°-70°	246.0	12.4
70°-80°	151.8	7.6
80°-90°	39.4	2.0
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°	551.2	27.7
0°-40°	890.9	44.8
0°-60°	1549.5	78.0
0°-90°	1986.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	720	721	720	719	718	68
15°	684	687	689	693	695	193
25°	614	618	625	636	640	283
35°	522	528	541	558	568	327
45°	418	425	446	472	487	322
55°	308	319	348	380	394	275
65°	200	215	249	280	297	198
75°	102	119	150	167	173	109
85°	25	31	35	33	31	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	724.2	724.2	724.2	724.2	724.2
2.5°	725.1	725.1	723.2	721.3	718.5
5°	720.4	721.3	720.4	719.4	718.5
7.5°	714.7	715.6	715.6	715.6	715.6
10°	708.0	709.0	709.0	709.0	709.0
12.5°	698.4	699.4	700.3	701.3	703.2
15°	684.2	687.0	688.9	692.7	694.6
17.5°	669.8	672.7	675.5	680.3	684.2
20°	653.6	655.5	660.2	666.0	669.8
22.5°	635.5	638.3	643.2	650.8	656.4
25°	614.5	618.4	625.0	635.5	640.3
27.5°	594.4	597.4	605.9	617.3	624.1
30°	570.6	574.5	584.9	599.3	605.9
32.5°	546.7	551.5	563.0	579.2	586.8
35°	521.9	527.6	541.0	558.2	567.7
37.5°	497.1	502.8	518.1	537.2	547.7
40°	471.4	477.1	494.3	515.3	526.7
42.5°	444.7	451.3	470.4	494.3	507.6
45°	417.9	424.6	445.6	472.3	486.6
47.5°	390.3	397.9	420.8	450.4	464.6
50°	362.6	371.2	396.9	427.5	441.8
52.5°	334.9	344.5	372.1	403.7	418.9
55°	308.2	318.7	348.3	379.8	394.1
57.5°	279.6	291.9	323.5	354.0	370.2
60°	252.9	266.2	298.7	329.2	346.4
62.5°	226.1	240.4	274.8	305.3	321.6
65°	200.4	214.7	249.0	280.5	296.8
67.5°	174.6	190.9	224.2	255.7	272.0
70°	149.8	167.0	199.4	230.0	246.1
72.5°	126.0	143.2	175.6	204.2	213.8
75°	102.1	119.3	149.8	167.0	172.7
77.5°	80.2	96.3	123.1	133.6	141.3
80°	60.1	74.4	93.5	100.2	101.2
82.5°	41.0	53.4	64.9	65.8	64.9
85°	24.8	31.4	35.3	33.4	31.4
87.5°	11.5	12.4	11.5	7.6	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)