

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: P259401

Luminaire Tested: **22CZ-LD5-44-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259401  
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-LD5-44-S-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4259.0 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

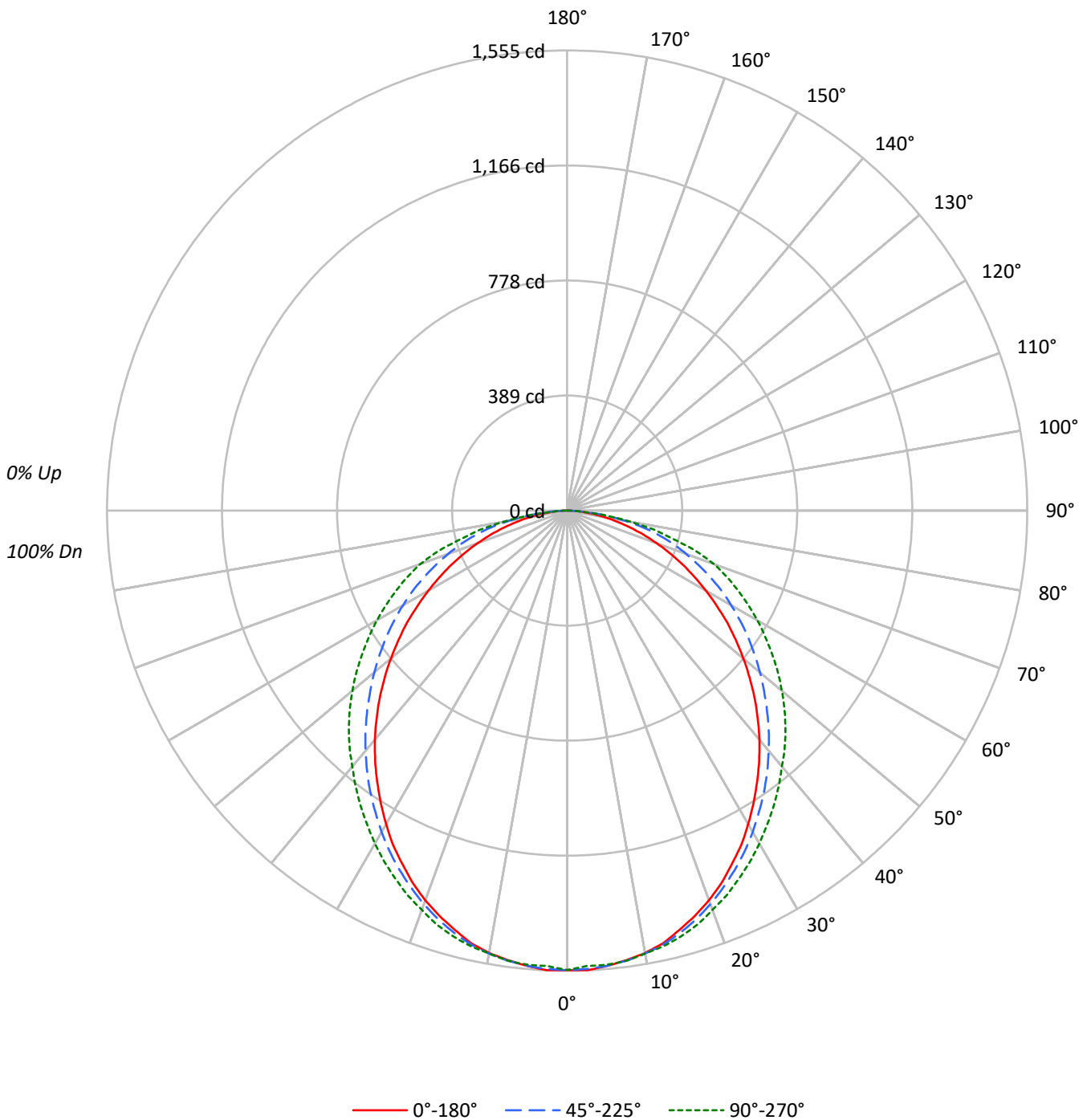
Input Watts (W): 34.503  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4178	4178	4178
5°	4172	4172	4161
10°	4148	4153	4153
15°	4086	4115	4149
20°	4013	4054	4113
25°	3912	3978	4075
30°	3801	3897	4036
35°	3676	3810	3999
40°	3550	3723	3967
45°	3410	3636	3970
50°	3255	3563	3965
55°	3100	3503	3964
60°	2918	3446	3997
65°	2735	3400	4051
70°	2527	3364	4153
75°	2276	3340	3850
80°	1998	3107	3360
85°	1643	2337	2084



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.6	3.4
10°-20°	416.5	9.8
20°-30°	618.6	14.5
30°-40°	728.2	17.1
40°-50°	742.4	17.4
50°-60°	669.5	15.7
60°-70°	527.4	12.4
70°-80°	325.3	7.6
80°-90°	84.5	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°	1181.8	27.7
0°-40°	1910.0	44.8
0°-60°	3321.9	78.0
0°-90°	4259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4259.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1553	1553	1553	1553	1553	
5°	1544	1546	1544	1542	1540	147
15°	1467	1473	1477	1485	1489	414
25°	1317	1326	1340	1362	1373	607
35°	1119	1131	1160	1197	1217	700
45°	896	910	955	1013	1043	691
55°	661	683	747	814	845	590
65°	430	460	534	601	636	426
75°	219	256	321	358	370	234
85°	53	68	76	72	68	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1552.7	1552.7	1552.7	1552.7	1552.7
2.5°	1554.7	1554.7	1550.6	1546.5	1540.4
5°	1544.5	1546.5	1544.5	1542.4	1540.4
7.5°	1532.2	1534.2	1534.2	1534.2	1534.2
10°	1517.9	1519.9	1519.9	1519.9	1519.9
12.5°	1497.4	1499.5	1501.5	1503.6	1507.7
15°	1466.7	1472.9	1477.0	1485.2	1489.2
17.5°	1436.1	1442.2	1448.3	1458.6	1466.7
20°	1401.3	1405.4	1415.6	1427.9	1436.1
22.5°	1362.4	1368.5	1378.8	1395.1	1407.4
25°	1317.4	1325.6	1339.9	1362.4	1372.6
27.5°	1274.4	1280.6	1299.0	1323.5	1337.9
30°	1223.3	1231.5	1254.0	1284.7	1299.0
32.5°	1172.2	1182.4	1206.9	1241.7	1258.1
35°	1119.0	1131.3	1159.9	1196.7	1217.2
37.5°	1065.8	1078.1	1110.8	1151.7	1174.2
40°	1010.6	1022.8	1059.7	1104.7	1129.2
42.5°	953.3	967.6	1008.5	1059.7	1088.3
45°	896.0	910.3	955.3	1012.6	1043.3
47.5°	836.7	853.0	902.1	965.6	996.2
50°	777.4	795.8	851.0	916.5	947.1
52.5°	718.0	738.5	797.8	865.3	898.0
55°	660.7	683.3	746.7	814.2	844.9
57.5°	599.4	626.0	693.5	758.9	793.7
60°	542.1	570.7	640.3	705.8	742.6
62.5°	484.8	515.5	589.2	654.6	689.4
65°	429.6	460.3	533.9	601.4	636.2
67.5°	374.4	409.1	480.7	548.2	583.0
70°	321.2	358.0	427.5	493.0	527.8
72.5°	270.0	306.8	376.4	437.8	458.2
75°	218.9	255.7	321.2	358.0	370.3
77.5°	171.8	206.6	263.9	286.4	302.8
80°	128.9	159.6	200.5	214.8	216.8
82.5°	88.0	114.6	139.1	141.2	139.1
85°	53.2	67.5	75.7	71.6	67.5
87.5°	24.5	26.6	24.5	16.4	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)