

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: P259477

Luminaire Tested: **22CZ-LD5-39-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259477  
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-LD5-39-S-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4136.0 lumens  
Efficiency: N/A  
Efficacy: 134.0 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

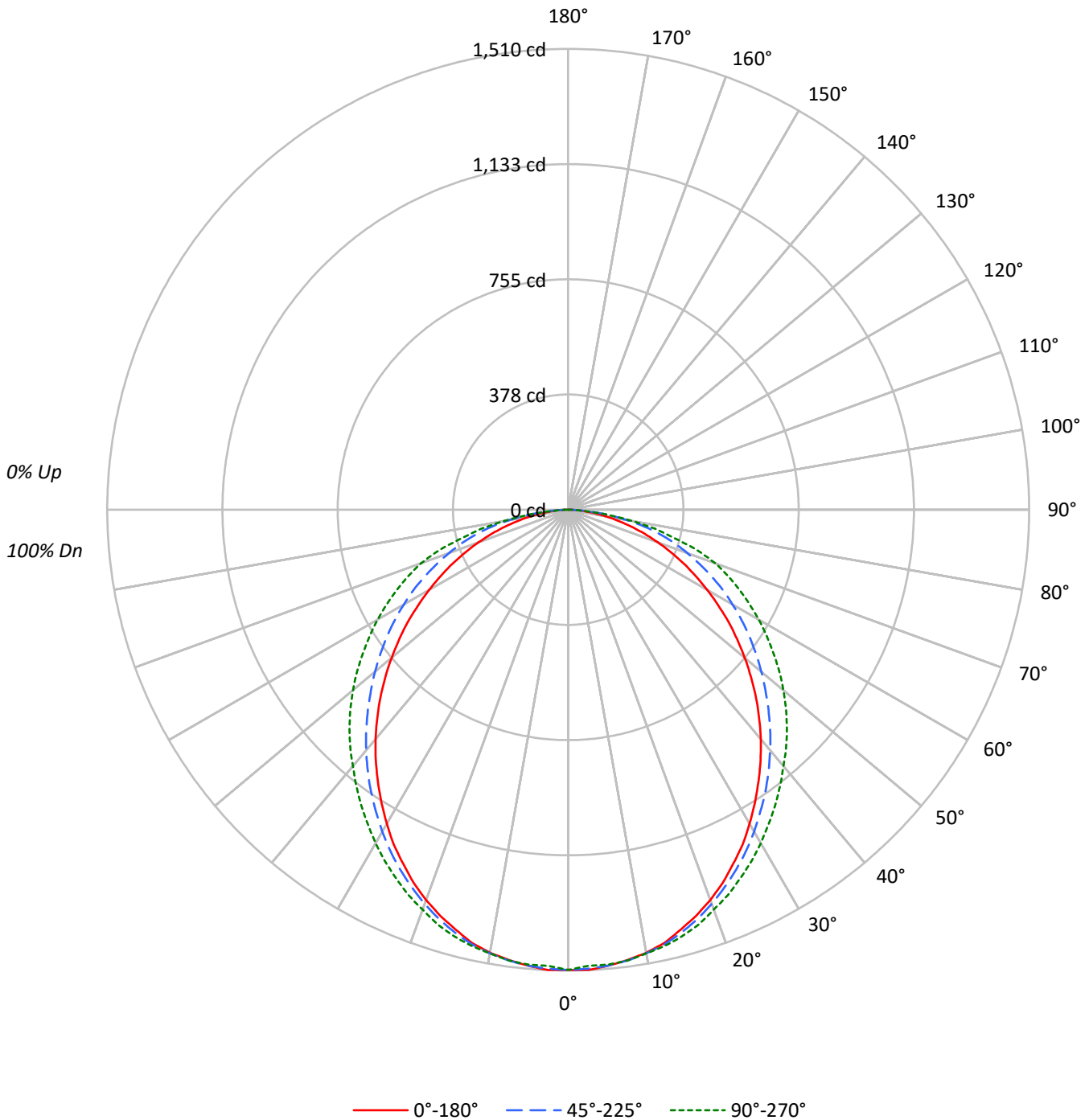
Input Watts (W): 30.876  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4057	4057	4057
5°	4052	4052	4041
10°	4028	4033	4033
15°	3968	3996	4029
20°	3897	3937	3994
25°	3799	3863	3958
30°	3691	3784	3920
35°	3570	3700	3883
40°	3447	3615	3852
45°	3311	3530	3856
50°	3160	3460	3851
55°	3011	3402	3849
60°	2833	3347	3881
65°	2656	3301	3934
70°	2454	3267	4032
75°	2210	3243	3739
80°	1940	3017	3264
85°	1596	2269	2025



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.4	3.4
10°-20°	404.5	9.8
20°-30°	600.8	14.5
30°-40°	707.2	17.1
40°-50°	720.9	17.4
50°-60°	650.2	15.7
60°-70°	512.2	12.4
70°-80°	315.9	7.6
80°-90°	82.0	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°	1147.6	27.7
0°-40°	1854.8	44.8
0°-60°	3225.9	78.0
0°-90°	4136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4136.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1500	1502	1500	1498	1496	142
15°	1424	1430	1434	1442	1446	402
25°	1279	1287	1301	1323	1333	590
35°	1087	1099	1126	1162	1182	680
45°	870	884	928	983	1013	671
55°	642	664	725	791	820	573
65°	417	447	518	584	618	413
75°	213	248	312	348	360	227
85°	52	66	74	70	66	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1507.8	1507.8	1507.8	1507.8	1507.8
2.5°	1509.8	1509.8	1505.8	1501.9	1495.9
5°	1499.9	1501.9	1499.9	1497.9	1495.9
7.5°	1488.0	1489.9	1489.9	1489.9	1489.9
10°	1474.0	1476.0	1476.0	1476.0	1476.0
12.5°	1454.2	1456.2	1458.2	1460.1	1464.1
15°	1424.4	1430.3	1434.3	1442.3	1446.2
17.5°	1394.6	1400.5	1406.5	1416.4	1424.4
20°	1360.8	1364.8	1374.7	1386.6	1394.6
22.5°	1323.1	1329.0	1339.0	1354.8	1366.8
25°	1279.4	1287.3	1301.2	1323.1	1333.0
27.5°	1237.6	1243.6	1261.5	1285.3	1299.2
30°	1188.0	1195.9	1217.8	1247.6	1261.5
32.5°	1138.3	1148.2	1172.1	1205.9	1221.7
35°	1086.7	1098.6	1126.4	1162.2	1182.0
37.5°	1035.0	1046.9	1078.7	1118.4	1140.3
40°	981.4	993.3	1029.1	1072.8	1096.6
42.5°	925.7	939.7	979.4	1029.1	1056.9
45°	870.1	884.0	927.7	983.4	1013.2
47.5°	812.5	828.4	876.1	937.7	967.5
50°	754.9	772.8	826.4	890.0	919.8
52.5°	697.3	717.2	774.8	840.3	872.1
55°	641.7	663.5	725.1	790.7	820.5
57.5°	582.1	607.9	673.5	737.0	770.8
60°	526.4	554.3	621.8	685.4	721.1
62.5°	470.8	500.6	572.1	635.7	669.5
65°	417.2	447.0	518.5	584.1	617.8
67.5°	363.5	397.3	466.8	532.4	566.2
70°	311.9	347.7	415.2	478.8	512.5
72.5°	262.2	298.0	365.5	425.1	445.0
75°	212.6	248.3	311.9	347.7	359.6
77.5°	166.9	200.6	256.3	278.1	294.0
80°	125.2	155.0	194.7	208.6	210.6
82.5°	85.4	111.2	135.1	137.1	135.1
85°	51.7	65.6	73.5	69.5	65.6
87.5°	23.8	25.8	23.8	15.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)