

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: P259474

Luminaire Tested: **22CZ-LD5-39-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259474  
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-3500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3923.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 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

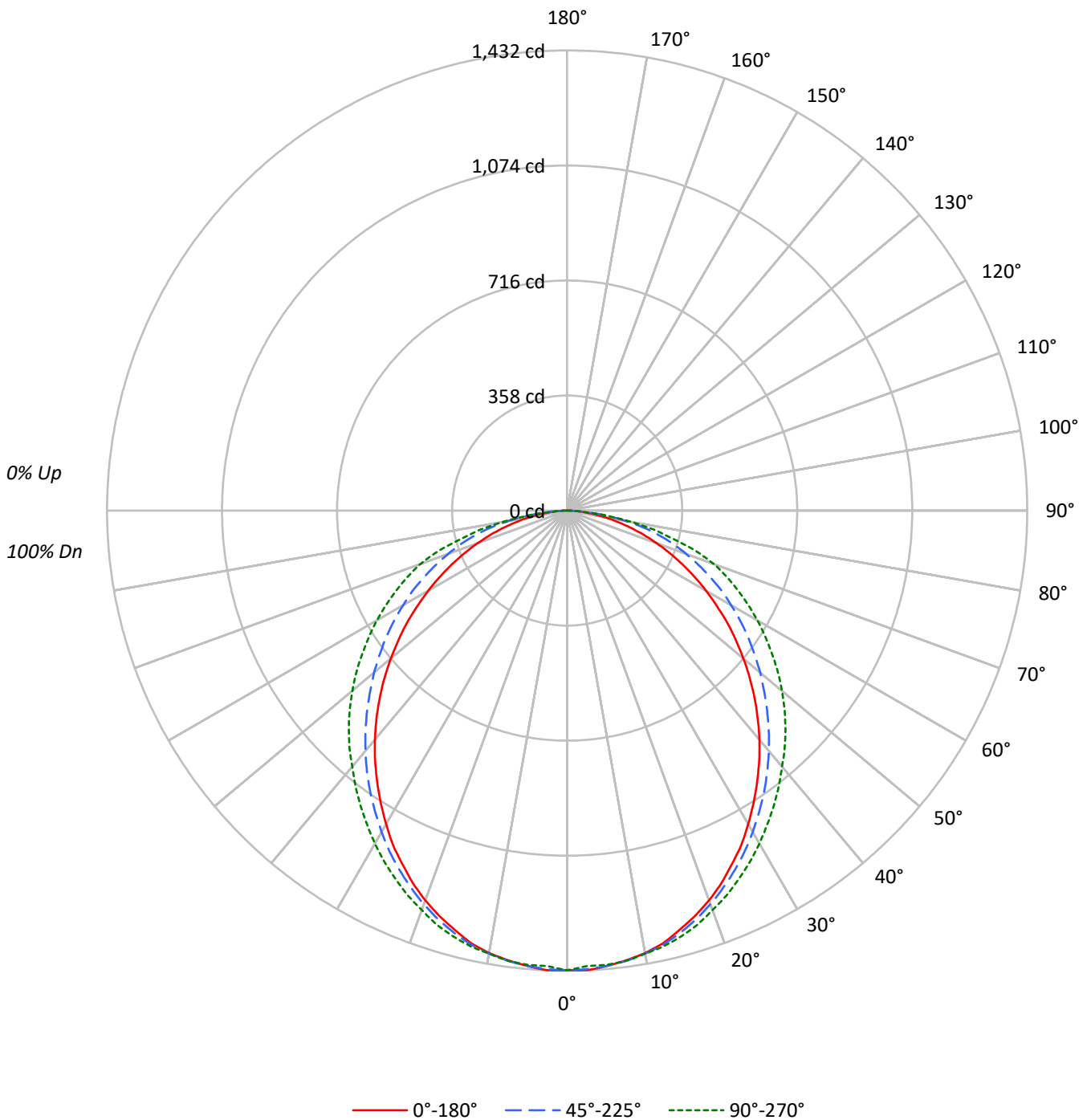
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58					58			
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3849	3849	3849
5°	3843	3843	3833
10°	3820	3825	3825
15°	3764	3790	3822
20°	3696	3734	3788
25°	3603	3665	3754
30°	3501	3589	3718
35°	3386	3510	3683
40°	3270	3429	3654
45°	3141	3349	3657
50°	2997	3282	3652
55°	2855	3227	3651
60°	2687	3174	3681
65°	2520	3131	3731
70°	2327	3098	3825
75°	2096	3075	3546
80°	1839	2862	3095
85°	1513	2152	1920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.0	3.4
10°-20°	383.7	9.8
20°-30°	569.8	14.5
30°-40°	670.7	17.1
40°-50°	683.8	17.4
50°-60°	616.7	15.7
60°-70°	485.8	12.4
70°-80°	299.6	7.6
80°-90°	77.8	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°	1088.5	27.7
0°-40°	1759.3	44.8
0°-60°	3059.8	78.0
0°-90°	3923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3923.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1423	1424	1423	1421	1419	135
15°	1351	1357	1360	1368	1372	381
25°	1214	1221	1234	1255	1264	559
35°	1031	1042	1068	1102	1121	645
45°	825	838	880	933	961	636
55°	609	629	688	750	778	543
65°	396	424	492	554	586	392
75°	202	236	296	330	341	215
85°	49	62	70	66	62	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1430.2	1430.2	1430.2	1430.2	1430.2
2.5°	1432.0	1432.0	1428.3	1424.5	1418.9
5°	1422.6	1424.5	1422.6	1420.7	1418.9
7.5°	1411.3	1413.2	1413.2	1413.2	1413.2
10°	1398.1	1400.0	1400.0	1400.0	1400.0
12.5°	1379.3	1381.2	1383.1	1384.9	1388.7
15°	1351.0	1356.7	1360.4	1368.0	1371.8
17.5°	1322.8	1328.4	1334.1	1343.5	1351.0
20°	1290.7	1294.5	1303.9	1315.2	1322.8
22.5°	1254.9	1260.6	1270.0	1285.1	1296.4
25°	1213.5	1221.0	1234.2	1254.9	1264.3
27.5°	1173.9	1179.6	1196.5	1219.1	1232.3
30°	1126.8	1134.3	1155.1	1183.3	1196.5
32.5°	1079.7	1089.1	1111.7	1143.8	1158.8
35°	1030.7	1042.0	1068.4	1102.3	1121.1
37.5°	981.7	993.0	1023.2	1060.8	1081.6
40°	930.8	942.1	976.1	1017.5	1040.1
42.5°	878.1	891.3	928.9	976.1	1002.4
45°	825.3	838.5	880.0	932.7	961.0
47.5°	770.7	785.7	831.0	889.4	917.6
50°	716.0	733.0	783.9	844.2	872.4
52.5°	661.4	680.2	734.9	797.0	827.2
55°	608.6	629.3	687.8	749.9	778.2
57.5°	552.1	576.6	638.8	699.1	731.1
60°	499.3	525.7	589.8	650.1	684.0
62.5°	446.6	474.8	542.7	603.0	635.0
65°	395.7	424.0	491.8	554.0	586.0
67.5°	344.8	376.9	442.8	505.0	537.0
70°	295.8	329.7	393.8	454.1	486.1
72.5°	248.7	282.6	346.7	403.2	422.1
75°	201.6	235.5	295.8	329.7	341.1
77.5°	158.3	190.3	243.1	263.8	278.9
80°	118.7	147.0	184.7	197.8	199.7
82.5°	81.0	105.5	128.1	130.0	128.1
85°	49.0	62.2	69.7	65.9	62.2
87.5°	22.6	24.5	22.6	15.1	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)