

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: P259472

Luminaire Tested: **22CZ-LD5-39-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259472  
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-2700K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3686.0 lumens  
Efficiency: N/A  
Efficacy: 122.3 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

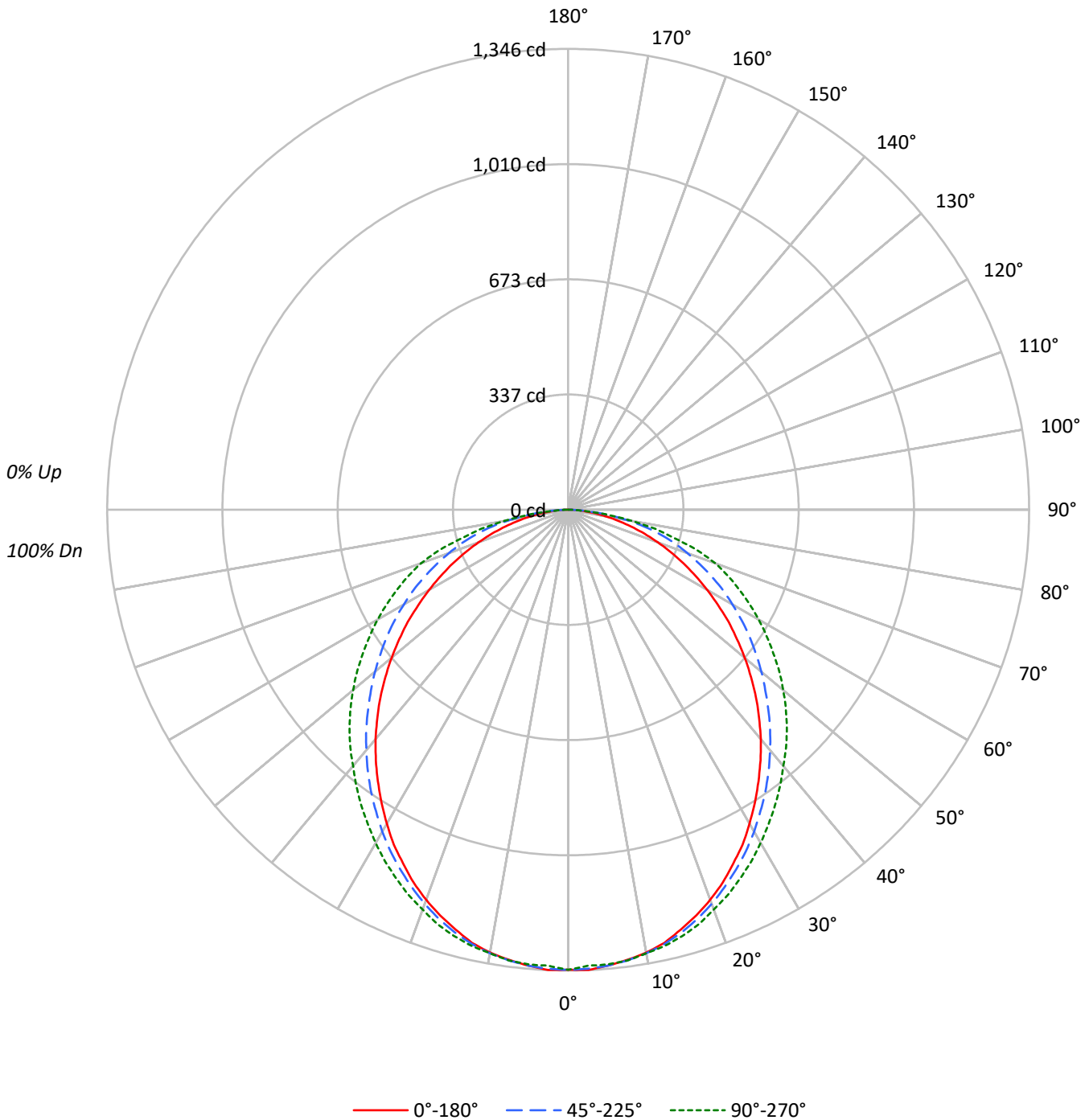
Input Watts (W): 30.132  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P259472

CATALOG NUMBER: 22CZ-LD5-39-S-UNV-L82765-W2A1-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P259472

CATALOG NUMBER: 22CZ-LD5-39-S-UNV-L82765-W2A1-U-2700K

**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°	3616	3616	3616
5°	3611	3611	3601
10°	3590	3594	3594
15°	3536	3561	3591
20°	3473	3508	3559
25°	3385	3443	3527
30°	3290	3372	3493
35°	3181	3298	3461
40°	3072	3222	3433
45°	2951	3146	3436
50°	2817	3083	3432
55°	2683	3032	3430
60°	2525	2982	3459
65°	2367	2942	3506
70°	2187	2911	3594
75°	1969	2890	3331
80°	1728	2689	2909
85°	1420	2022	1803



TEST NUMBER: P259472

CATALOG NUMBER: 22CZ-LD5-39-S-UNV-L82765-W2A1-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.9	3.4
10°-20°	360.5	9.8
20°-30°	535.4	14.5
30°-40°	630.2	17.1
40°-50°	642.5	17.4
50°-60°	579.5	15.7
60°-70°	456.4	12.4
70°-80°	281.5	7.6
80°-90°	73.1	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°	1022.8	27.7
0°-40°	1653.0	44.8
0°-60°	2874.9	78.0
0°-90°	3686.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3686.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1337	1338	1337	1335	1333	127
15°	1269	1275	1278	1285	1289	358
25°	1140	1147	1160	1179	1188	525
35°	968	979	1004	1036	1053	606
45°	776	788	827	876	903	598
55°	572	591	646	705	731	510
65°	372	398	462	520	551	368
75°	189	221	278	310	320	202
85°	46	58	66	62	58	54
90°	0	0	0	0	0	



TEST NUMBER: P259472

CATALOG NUMBER: 22CZ-LD5-39-S-UNV-L82765-W2A1-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1343.8	1343.8	1343.8	1343.8	1343.8
2.5°	1345.5	1345.5	1342.0	1338.5	1333.1
5°	1336.7	1338.5	1336.7	1334.9	1333.1
7.5°	1326.1	1327.8	1327.8	1327.8	1327.8
10°	1313.7	1315.4	1315.4	1315.4	1315.4
12.5°	1296.0	1297.7	1299.5	1301.3	1304.8
15°	1269.4	1274.7	1278.3	1285.3	1288.9
17.5°	1242.8	1248.2	1253.5	1262.3	1269.4
20°	1212.8	1216.3	1225.1	1235.8	1242.8
22.5°	1179.1	1184.4	1193.3	1207.4	1218.1
25°	1140.2	1147.2	1159.6	1179.1	1188.0
27.5°	1103.0	1108.3	1124.2	1145.5	1157.9
30°	1058.7	1065.8	1085.3	1111.8	1124.2
32.5°	1014.5	1023.3	1044.6	1074.7	1088.8
35°	968.4	979.1	1003.8	1035.7	1053.4
37.5°	922.4	933.0	961.3	996.8	1016.2
40°	874.6	885.2	917.1	956.0	977.3
42.5°	825.0	837.4	872.8	917.1	941.9
45°	775.5	787.8	826.8	876.4	902.9
47.5°	724.1	738.3	780.8	835.6	862.2
50°	672.8	688.7	736.5	793.2	819.7
52.5°	621.4	639.1	690.5	748.9	777.2
55°	571.9	591.3	646.2	704.6	731.2
57.5°	518.7	541.8	600.2	656.8	686.9
60°	469.2	494.0	554.1	610.8	642.7
62.5°	419.6	446.2	509.9	566.5	596.6
65°	371.8	398.3	462.1	520.5	550.6
67.5°	324.0	354.1	416.1	474.5	504.6
70°	278.0	309.8	370.0	426.7	456.8
72.5°	233.7	265.6	325.8	378.9	396.6
75°	189.4	221.3	278.0	309.8	320.4
77.5°	148.7	178.8	228.4	247.9	262.0
80°	111.5	138.1	173.5	185.9	187.7
82.5°	76.1	99.1	120.4	122.2	120.4
85°	46.0	58.4	65.5	62.0	58.4
87.5°	21.2	23.0	21.2	14.2	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)