

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: P260296

Luminaire Tested: **22CZ-LD5-29-SQP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260296  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-29-SQP-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1743.0 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

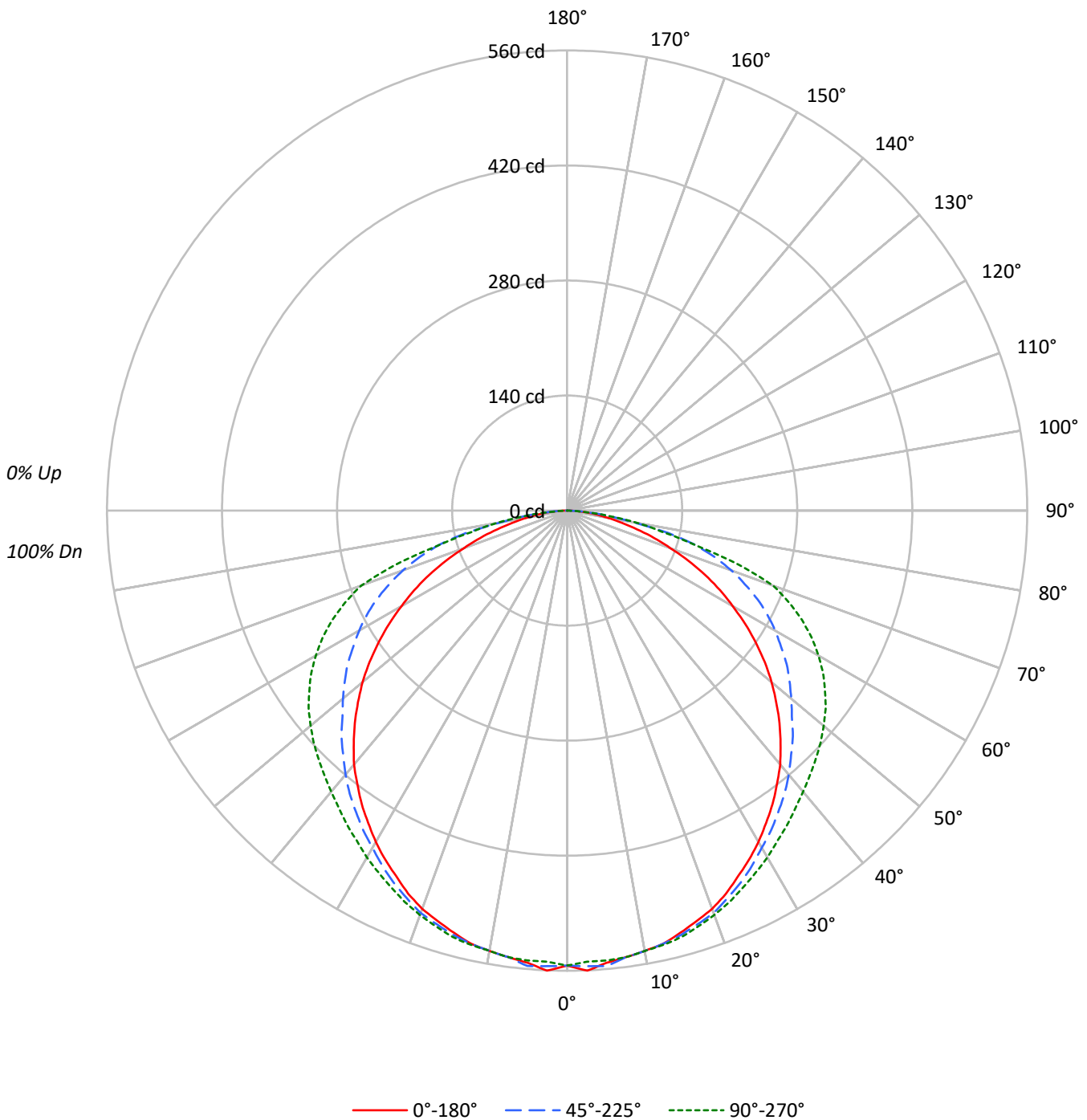
Input Watts (W): 20.925  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P260296

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L82765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P260296

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L82765-W2A1-U-3500K

**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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83					83			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56					56			
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47					47			
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41					41			
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35					35			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28					28			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25					25			
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22					22			

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

	0°	45°	90°
0°	1490	1490	1490
5°	1492	1503	1485
10°	1487	1487	1487
15°	1482	1490	1497
20°	1477	1492	1500
25°	1459	1483	1503
30°	1447	1472	1514
35°	1432	1472	1534
40°	1417	1474	1569
45°	1391	1478	1628
50°	1360	1490	1706
55°	1315	1530	1797
60°	1253	1574	1901
65°	1181	1629	2008
70°	1054	1672	2098
75°	915	1675	1660
80°	776	1238	1342
85°	670	837	753



TEST NUMBER: P260296

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L82765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.6	3.0
10°-20°	151.0	8.7
20°-30°	230.0	13.2
30°-40°	281.5	16.1
40°-50°	302.9	17.4
50°-60°	293.4	16.8
60°-70°	248.5	14.3
70°-80°	150.2	8.6
80°-90°	33.0	1.9
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°	433.6	24.9
0°-40°	715.0	41.0
0°-60°	1311.3	75.2
0°-90°	1743.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1743.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	552	552	556	554	550	53
15°	532	533	535	536	537	150
25°	491	494	500	504	506	227
35°	436	439	448	460	467	273
45°	366	372	388	413	428	282
55°	280	292	326	364	383	250
65°	185	206	256	296	315	183
75°	88	119	161	164	160	95
85°	22	26	27	26	24	24
90°	0	0	0	0	0	



TEST NUMBER: P260296

CATALOG NUMBER: 22CZ-LD5-29-SQP-UNV-L82765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	553.6	553.6	553.6	553.6	553.6
2.5°	560.4	559.0	555.0	552.3	549.6
5°	552.3	552.3	556.3	553.6	549.6
7.5°	548.2	548.2	548.2	555.0	548.2
10°	544.1	545.5	544.1	549.6	544.1
12.5°	540.1	540.1	540.1	541.4	541.4
15°	532.0	533.3	534.7	536.0	537.4
17.5°	523.8	525.2	527.9	529.3	530.6
20°	515.7	517.1	521.1	521.1	523.8
22.5°	504.9	504.9	510.3	511.7	515.7
25°	491.4	494.1	499.5	503.5	506.2
27.5°	479.2	481.9	487.3	492.7	496.8
30°	465.6	468.3	473.8	481.9	487.3
32.5°	450.7	453.5	461.6	471.1	476.5
35°	435.9	438.6	448.0	460.2	467.0
37.5°	419.6	423.7	434.5	448.0	456.2
40°	403.4	407.4	419.6	434.5	446.7
42.5°	384.4	389.8	403.4	423.7	437.2
45°	365.5	372.2	388.5	412.8	427.7
47.5°	345.2	351.9	370.9	402.0	418.3
50°	324.9	333.0	356.0	389.8	407.4
52.5°	303.2	311.3	341.1	377.7	396.6
55°	280.2	292.4	326.2	364.1	383.1
57.5°	257.2	270.7	308.6	349.2	369.5
60°	232.8	249.1	292.4	333.0	353.3
62.5°	209.8	227.4	274.8	315.4	335.7
65°	185.4	205.7	255.8	296.4	315.4
67.5°	159.7	185.4	234.2	273.4	292.4
70°	134.0	163.8	212.5	249.1	266.7
72.5°	111.0	142.1	188.2	219.3	219.3
75°	88.0	119.1	161.1	163.8	159.7
77.5°	67.7	97.5	125.9	115.1	117.8
80°	50.1	74.4	79.9	83.9	86.6
82.5°	33.8	50.1	51.4	54.1	54.1
85°	21.7	25.7	27.1	25.7	24.4
87.5°	9.5	10.8	8.1	5.4	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)