

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: P258806

Luminaire Tested: **14CZ-LD5-39-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258806  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-39-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4137.0 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

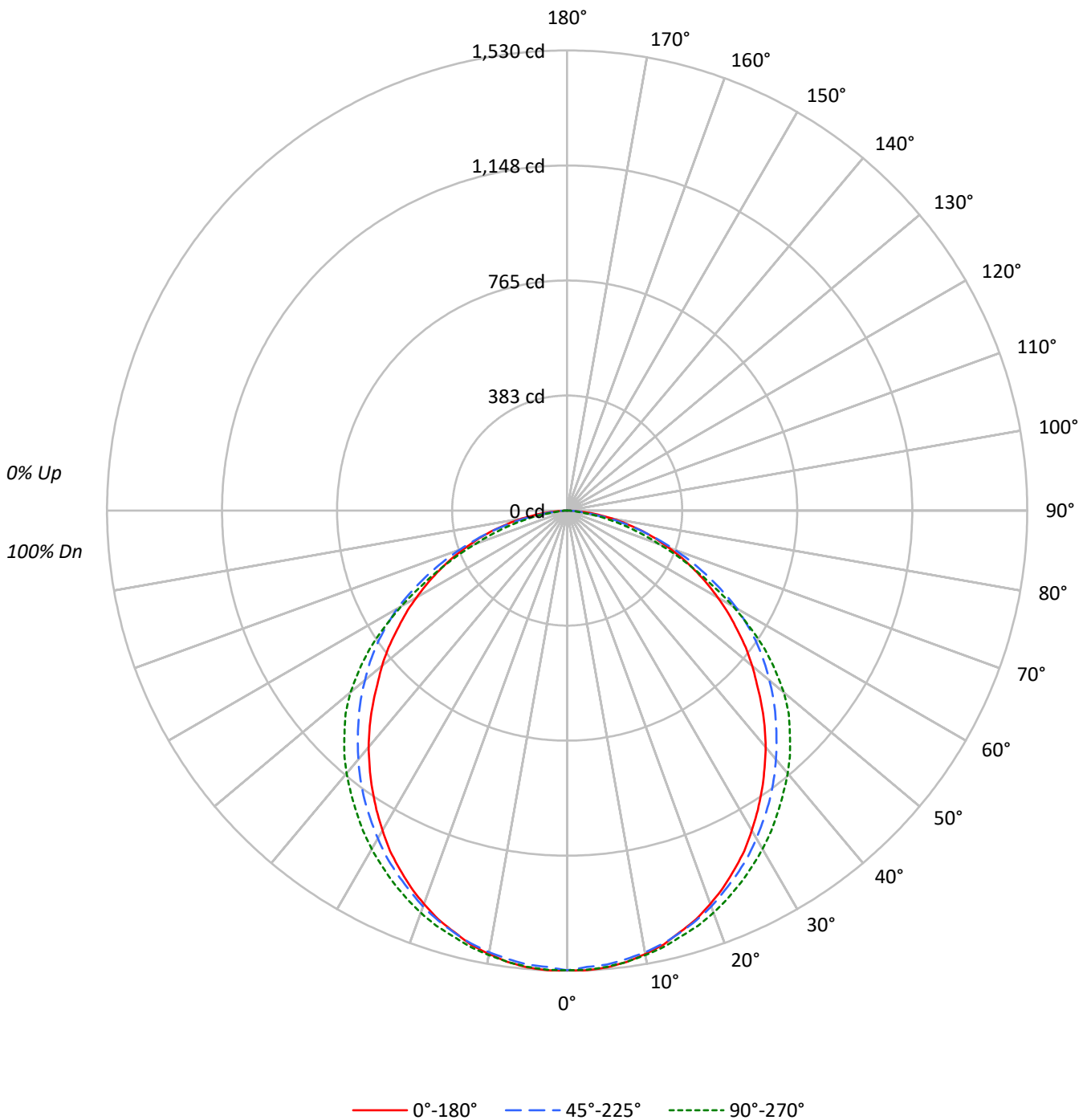
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	4112	4112	4112
5°	4118	4093	4113
10°	4090	4075	4100
15°	4042	4047	4083
20°	3986	4012	4075
25°	3908	3963	4056
30°	3815	3912	4038
35°	3712	3858	4015
40°	3607	3795	4008
45°	3479	3732	3985
50°	3365	3674	3936
55°	3234	3615	3762
60°	3115	3512	3433
65°	2981	3287	3017
70°	2814	2987	2552
75°	2626	2588	2109
80°	2314	1999	1542
85°	1822	966	855



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.4	3.5
10°-20°	411.4	9.9
20°-30°	617.4	14.9
30°-40°	736.0	17.8
40°-50°	758.1	18.3
50°-60°	675.6	16.3
60°-70°	486.8	11.8
70°-80°	254.6	6.2
80°-90°	52.6	1.3
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°	1173.1	28.4
0°-40°	1909.2	46.1
0°-60°	3342.9	80.8
0°-90°	4137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4137.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1524	1521	1515	1524	1523	145
15°	1451	1453	1453	1467	1466	409
25°	1316	1324	1335	1360	1366	606
35°	1130	1145	1174	1213	1222	707
45°	914	935	981	1036	1047	706
55°	689	712	771	806	802	618
65°	468	485	516	492	474	464
75°	253	266	249	216	203	268
85°	59	52	31	28	28	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1528.2	1528.2	1528.2	1528.2	1528.2
2.5°	1530.1	1526.4	1519.0	1528.2	1528.2
5°	1524.5	1520.8	1515.3	1524.5	1522.7
7.5°	1513.5	1509.8	1504.2	1515.3	1513.5
10°	1496.9	1495.0	1491.3	1502.4	1500.6
12.5°	1478.4	1476.6	1474.7	1485.8	1485.8
15°	1450.8	1452.6	1452.6	1467.4	1465.5
17.5°	1425.0	1426.8	1428.7	1447.1	1447.1
20°	1391.8	1393.6	1401.0	1421.3	1423.1
22.5°	1356.8	1358.6	1367.8	1391.8	1395.5
25°	1316.2	1323.6	1334.6	1360.5	1366.0
27.5°	1275.7	1281.2	1299.6	1329.1	1332.8
30°	1227.7	1238.8	1259.1	1292.2	1299.6
32.5°	1179.8	1192.7	1216.7	1253.5	1262.8
35°	1130.0	1144.8	1174.3	1213.0	1222.2
37.5°	1078.4	1091.3	1128.2	1168.7	1181.6
40°	1026.8	1039.7	1080.3	1126.3	1141.1
42.5°	971.5	989.9	1030.5	1082.1	1096.8
45°	914.3	934.6	980.7	1036.0	1047.1
47.5°	855.4	877.5	930.9	986.2	999.1
50°	803.7	824.0	877.5	930.9	940.2
52.5°	748.4	766.9	825.9	870.1	871.9
55°	689.4	711.6	770.6	805.6	801.9
57.5°	636.0	654.4	711.6	730.0	718.9
60°	578.8	595.4	652.6	654.4	637.8
62.5°	523.5	540.1	584.4	571.5	551.2
65°	468.2	484.8	516.2	492.2	473.8
67.5°	414.8	429.5	448.0	416.6	398.2
70°	357.6	377.9	379.7	342.9	324.4
72.5°	307.9	318.9	315.2	280.2	263.6
75°	252.6	265.5	248.9	215.7	202.8
77.5°	200.9	210.2	188.0	156.7	147.5
80°	149.3	154.8	129.0	105.1	99.5
82.5°	101.4	101.4	73.7	57.1	51.6
85°	59.0	51.6	31.3	27.7	27.7
87.5°	20.3	12.9	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)