

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: P259316

Luminaire Tested: **22CZ-LD5-44-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259316  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-44-UNV-L82765-W2A1-U-4000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4410.0 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

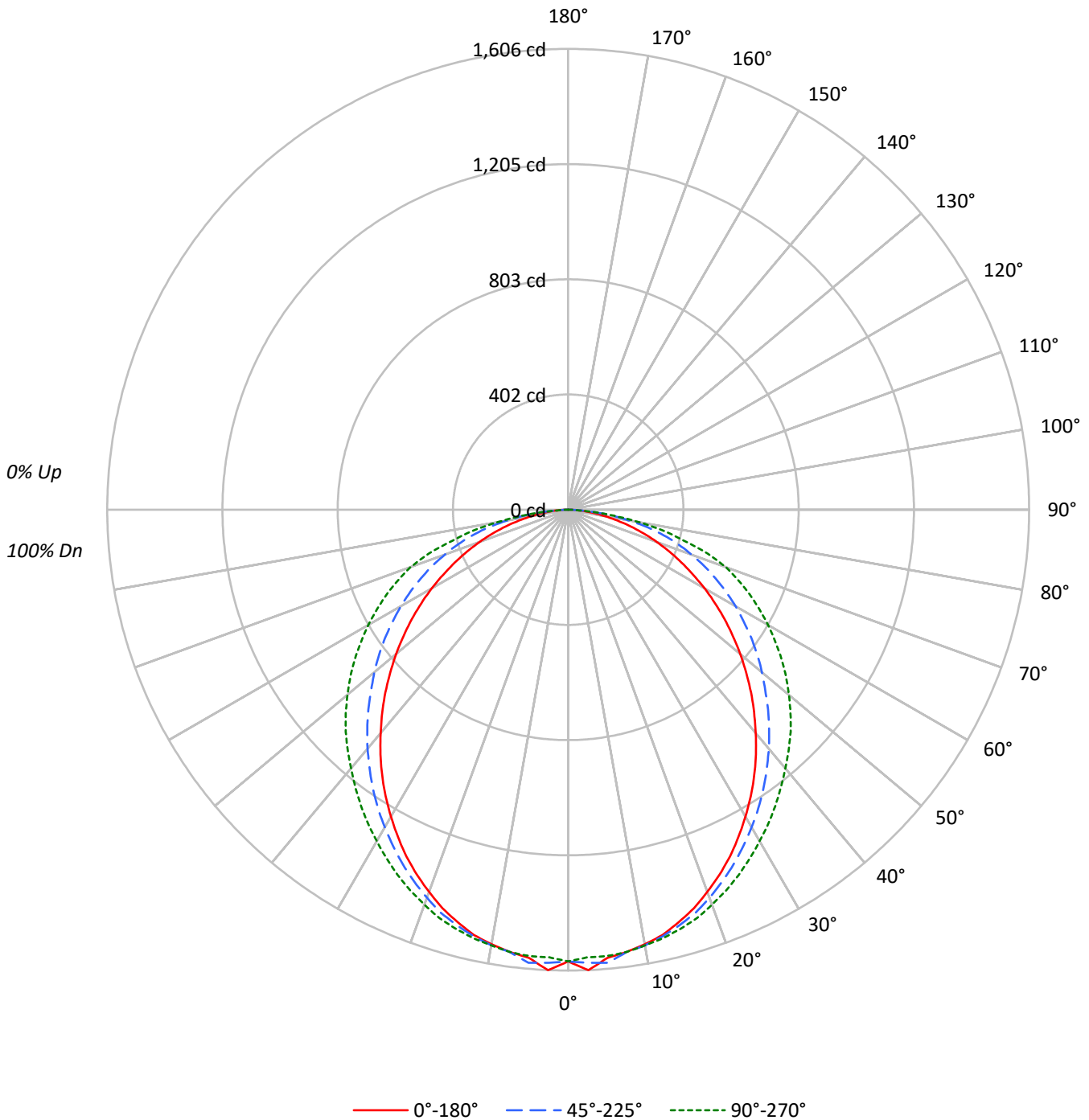
Input Watts (W): 34.968  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	4236	4236	4236
5°	4234	4281	4217
10°	4201	4213	4213
15°	4146	4176	4212
20°	4059	4121	4194
25°	3961	4050	4171
30°	3838	3971	4145
35°	3713	3896	4135
40°	3571	3819	4136
45°	3428	3746	4170
50°	3277	3690	4201
55°	3119	3652	4256
60°	2955	3624	4328
65°	2772	3605	4438
70°	2581	3594	4589
75°	2341	3590	4348
80°	2027	3324	3856
85°	1723	2516	2448



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.3	3.4
10°-20°	422.9	9.6
20°-30°	629.1	14.3
30°-40°	744.0	16.9
40°-50°	764.7	17.3
50°-60°	698.8	15.8
60°-70°	559.0	12.7
70°-80°	350.8	8.0
80°-90°	91.4	2.1
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°	1201.3	27.2
0°-40°	1945.3	44.1
0°-60°	3408.8	77.3
0°-90°	4410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4410.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1568	1568	1585	1574	1561	149
15°	1488	1490	1499	1508	1512	419
25°	1334	1342	1364	1388	1405	613
35°	1130	1145	1186	1231	1259	706
45°	901	924	984	1057	1096	694
55°	665	697	778	864	907	595
65°	435	474	566	652	697	432
75°	225	268	345	397	418	239
85°	56	71	82	79	79	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1574.1	1574.1	1574.1	1574.1	1574.1
2.5°	1606.2	1599.8	1580.5	1567.6	1561.2
5°	1567.6	1567.6	1584.8	1574.1	1561.2
7.5°	1554.8	1554.8	1554.8	1586.9	1554.8
10°	1537.6	1539.8	1541.9	1554.8	1541.9
12.5°	1518.3	1518.3	1522.6	1526.9	1529.0
15°	1488.3	1490.4	1499.0	1507.6	1511.9
17.5°	1456.1	1462.6	1473.3	1484.0	1492.6
20°	1417.5	1426.1	1439.0	1456.1	1464.7
22.5°	1376.8	1385.4	1402.5	1421.8	1436.8
25°	1333.9	1342.5	1363.9	1387.5	1404.7
27.5°	1284.6	1295.3	1321.0	1353.2	1370.3
30°	1235.2	1248.1	1278.1	1314.6	1333.9
32.5°	1183.8	1198.8	1233.1	1273.8	1297.4
35°	1130.2	1145.2	1185.9	1231.0	1258.8
37.5°	1074.4	1091.6	1136.6	1188.1	1218.1
40°	1016.5	1035.8	1087.3	1143.0	1177.3
42.5°	958.6	980.0	1035.8	1102.3	1136.6
45°	900.7	924.3	984.3	1057.2	1095.8
47.5°	840.7	868.5	930.7	1012.2	1050.8
50°	782.7	810.6	881.4	965.0	1003.6
52.5°	722.7	754.9	829.9	915.7	956.5
55°	664.8	697.0	778.5	864.2	907.1
57.5°	606.9	639.1	724.8	812.8	855.7
60°	549.0	583.3	673.4	759.2	804.2
62.5°	491.1	527.6	619.8	707.7	750.6
65°	435.3	473.9	566.2	651.9	697.0
67.5°	381.7	422.5	512.5	596.2	641.2
70°	328.1	368.9	456.8	538.3	583.3
72.5°	276.6	317.4	403.2	476.1	510.4
75°	225.2	268.1	345.3	396.7	418.2
77.5°	175.9	218.7	285.2	319.5	343.1
80°	130.8	167.3	214.5	240.2	248.8
82.5°	90.1	120.1	150.1	156.5	160.8
85°	55.8	70.8	81.5	79.3	79.3
87.5°	25.7	27.9	23.6	17.2	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)