

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: P259230

Luminaire Tested: **22CZ-LD5-39-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259230  
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-LD5-39-UNV-L83050-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: 4135.0 lumens  
Efficiency: N/A  
Efficacy: 134.3 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

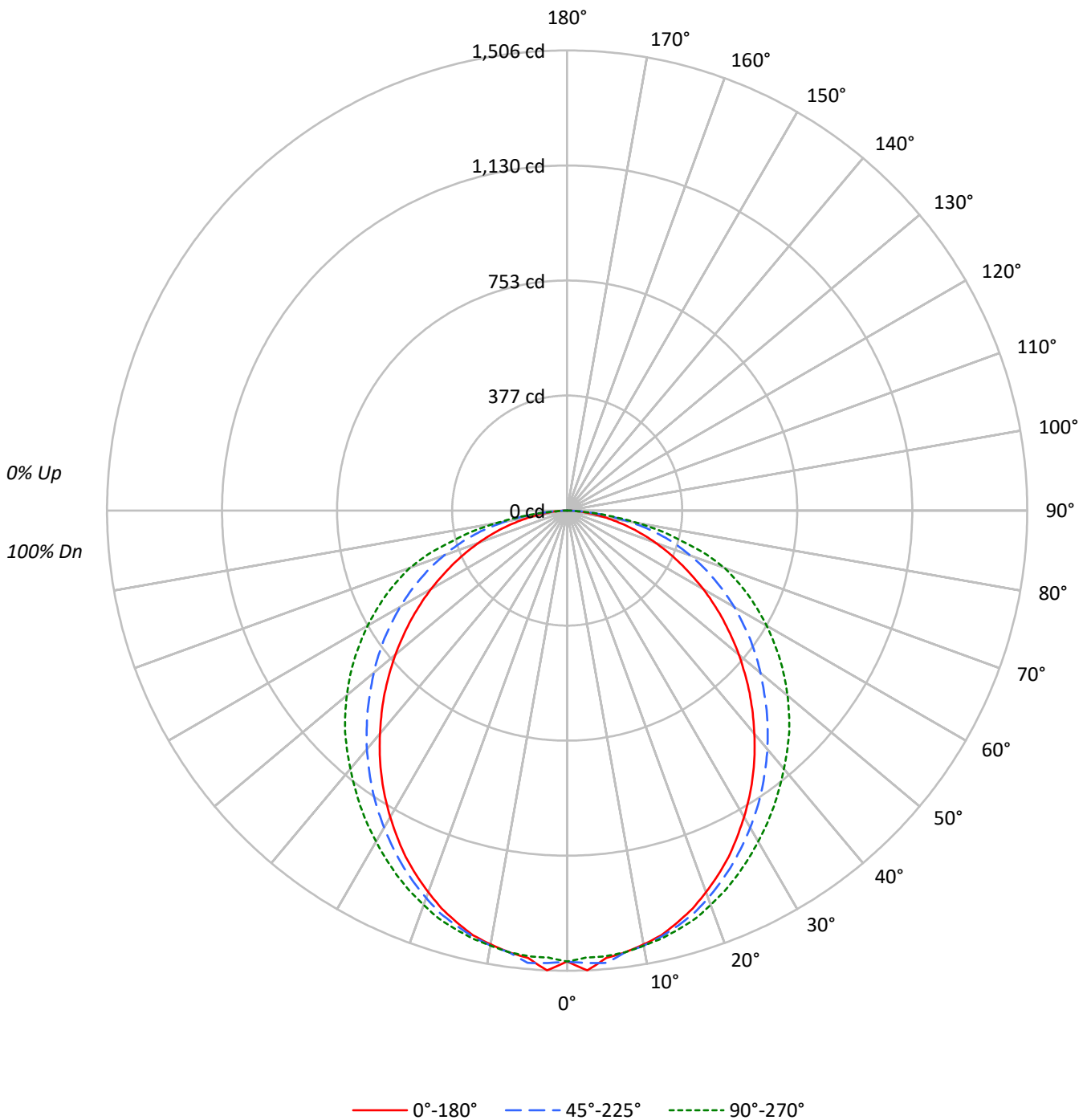
Input Watts (W): 30.783  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3972	3972	3972
5°	3971	4014	3954
10°	3939	3951	3951
15°	3888	3916	3949
20°	3806	3864	3933
25°	3714	3797	3911
30°	3599	3724	3886
35°	3481	3653	3877
40°	3348	3581	3878
45°	3214	3513	3910
50°	3072	3460	3940
55°	2924	3424	3991
60°	2771	3398	4058
65°	2599	3380	4161
70°	2421	3370	4303
75°	2195	3366	4077
80°	1901	3116	3615
85°	1615	2359	2297



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.0	3.4
10°-20°	396.5	9.6
20°-30°	589.9	14.3
30°-40°	697.6	16.9
40°-50°	717.0	17.3
50°-60°	655.2	15.8
60°-70°	524.1	12.7
70°-80°	328.9	8.0
80°-90°	85.7	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°	1126.4	27.2
0°-40°	1824.0	44.1
0°-60°	3196.2	77.3
0°-90°	4135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4135.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1470	1470	1486	1476	1464	140
15°	1396	1398	1406	1414	1418	393
25°	1251	1259	1279	1301	1317	575
35°	1060	1074	1112	1154	1180	662
45°	844	867	923	991	1028	651
55°	623	654	730	810	851	558
65°	408	444	531	611	654	405
75°	211	251	324	372	392	224
85°	52	66	76	74	74	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1475.9	1475.9	1475.9	1475.9	1475.9
2.5°	1506.1	1500.1	1482.0	1469.9	1463.9
5°	1469.9	1469.9	1486.0	1475.9	1463.9
7.5°	1457.8	1457.8	1457.8	1488.0	1457.8
10°	1441.7	1443.7	1445.8	1457.8	1445.8
12.5°	1423.6	1423.6	1427.7	1431.7	1433.7
15°	1395.5	1397.5	1405.5	1413.6	1417.6
17.5°	1365.3	1371.4	1381.4	1391.5	1399.5
20°	1329.1	1337.2	1349.2	1365.3	1373.4
22.5°	1290.9	1299.0	1315.1	1333.2	1347.2
25°	1250.7	1258.8	1278.9	1301.0	1317.1
27.5°	1204.5	1214.5	1238.6	1268.8	1284.9
30°	1158.2	1170.3	1198.4	1232.6	1250.7
32.5°	1110.0	1124.0	1156.2	1194.4	1216.5
35°	1059.7	1073.8	1112.0	1154.2	1180.3
37.5°	1007.4	1023.5	1065.7	1114.0	1142.1
40°	953.1	971.2	1019.5	1071.8	1103.9
42.5°	898.8	918.9	971.2	1033.5	1065.7
45°	844.5	866.7	923.0	991.3	1027.5
47.5°	788.2	814.4	872.7	949.1	985.3
50°	733.9	760.1	826.4	904.9	941.1
52.5°	677.6	707.8	778.2	858.6	896.8
55°	623.3	653.5	729.9	810.3	850.6
57.5°	569.1	599.2	679.6	762.1	802.3
60°	514.8	546.9	631.4	711.8	754.0
62.5°	460.5	494.7	581.1	663.6	703.8
65°	408.2	444.4	530.8	611.3	653.5
67.5°	357.9	396.1	480.6	559.0	601.2
70°	307.7	345.9	428.3	504.7	546.9
72.5°	259.4	297.6	378.0	446.4	478.6
75°	211.1	251.3	323.7	372.0	392.1
77.5°	164.9	205.1	267.4	299.6	321.7
80°	122.7	156.8	201.1	225.2	233.3
82.5°	84.5	112.6	140.8	146.8	150.8
85°	52.3	66.4	76.4	74.4	74.4
87.5°	24.1	26.1	22.1	16.1	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)