

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: P260407

Luminaire Tested: **22CZ-LD5-39-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260407  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-39-RDP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3076.0 lumens  
Efficiency: N/A  
Efficacy: 97.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

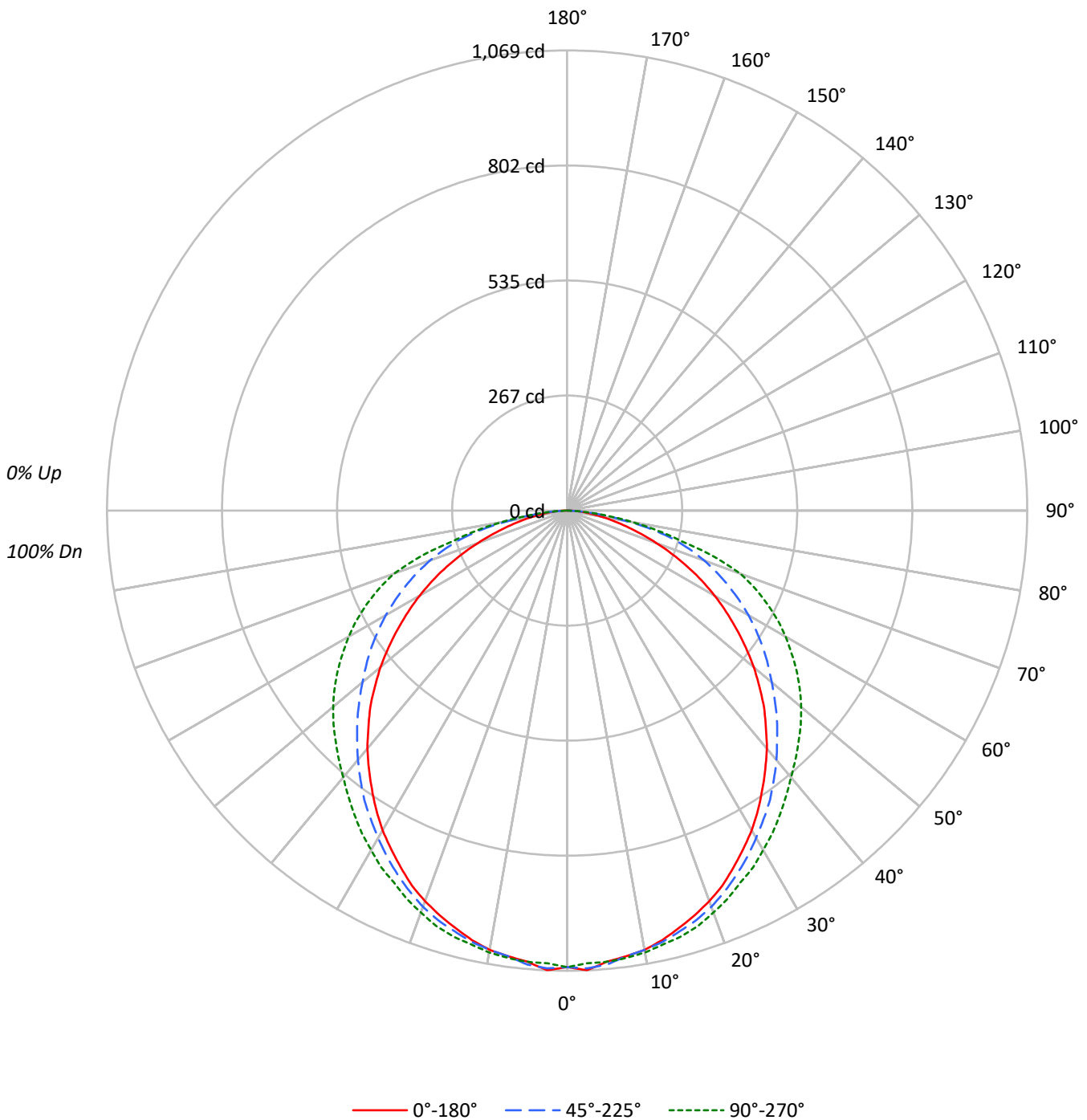
Input Watts (W): 31.62  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	81	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23					23			

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

	0°	45°	90°
0°	2854	2854	2854
5°	2843	2859	2843
10°	2831	2831	2848
15°	2796	2819	2853
20°	2764	2805	2845
25°	2715	2769	2830
30°	2665	2728	2829
35°	2598	2698	2831
40°	2536	2657	2842
45°	2461	2624	2894
50°	2368	2598	2971
55°	2255	2607	3054
60°	2128	2619	3154
65°	1962	2634	3266
70°	1739	2664	3366
75°	1475	2656	2868
80°	1226	2137	2388
85°	1065	1439	1377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	3.3
10°-20°	285.8	9.3
20°-30°	430.0	14.0
30°-40°	515.3	16.8
40°-50°	537.3	17.5
50°-60°	500.3	16.3
60°-70°	406.2	13.2
70°-80°	244.8	8.0
80°-90°	56.1	1.8
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°	816.0	26.5
0°-40°	1331.2	43.3
0°-60°	2368.8	77.0
0°-90°	3076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1052	1052	1058	1060	1052	100
15°	1004	1008	1012	1018	1024	283
25°	914	921	933	945	953	421
35°	791	801	821	846	862	495
45°	647	659	689	734	760	498
55°	481	501	556	616	651	430
65°	308	341	414	478	513	305
75°	142	189	256	272	276	153
85°	34	43	47	45	45	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1060.5	1060.5	1060.5	1060.5	1060.5
2.5°	1068.6	1066.6	1064.5	1058.5	1052.4
5°	1052.4	1052.4	1058.5	1060.5	1052.4
7.5°	1044.3	1044.3	1044.3	1052.4	1048.3
10°	1036.2	1036.2	1036.2	1042.2	1042.2
12.5°	1022.0	1024.0	1026.0	1028.0	1032.1
15°	1003.7	1007.8	1011.8	1017.9	1024.0
17.5°	985.5	989.5	997.6	1003.7	1011.8
20°	965.2	969.2	979.4	985.5	993.6
22.5°	942.9	944.9	957.1	965.2	975.3
25°	914.5	920.6	932.7	944.9	953.0
27.5°	886.1	892.2	906.4	922.6	934.8
30°	857.7	863.8	878.0	898.3	910.4
32.5°	825.3	833.4	849.6	873.9	888.1
35°	790.8	800.9	821.2	845.6	861.8
37.5°	756.3	766.5	788.8	819.2	835.4
40°	721.9	732.0	756.3	788.8	809.1
42.5°	683.3	695.5	721.9	760.4	784.7
45°	646.8	659.0	689.4	734.0	760.4
47.5°	606.3	620.5	654.9	705.6	736.1
50°	565.7	582.0	620.5	677.3	709.7
52.5°	523.1	541.4	588.0	646.8	681.3
55°	480.6	500.8	555.6	616.4	650.9
57.5°	438.0	460.3	521.1	584.0	618.4
60°	395.4	419.7	486.6	551.5	586.0
62.5°	352.8	379.2	450.2	515.0	551.5
65°	308.2	340.7	413.7	478.5	513.0
67.5°	263.6	302.1	377.2	440.0	472.5
70°	221.0	263.6	338.6	397.4	427.8
72.5°	180.5	225.1	298.1	348.8	360.9
75°	141.9	188.6	255.5	271.7	275.8
77.5°	109.5	152.1	202.8	206.8	217.0
80°	79.1	115.6	137.9	150.1	154.1
82.5°	54.7	79.1	91.2	93.3	95.3
85°	34.5	42.6	46.6	44.6	44.6
87.5°	18.2	16.2	14.2	10.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)