

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: P390438

Luminaire Tested: **22CZ2-50VHE-RDP-UNV-L950-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P390438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-50VHE-RDP-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3031.5 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

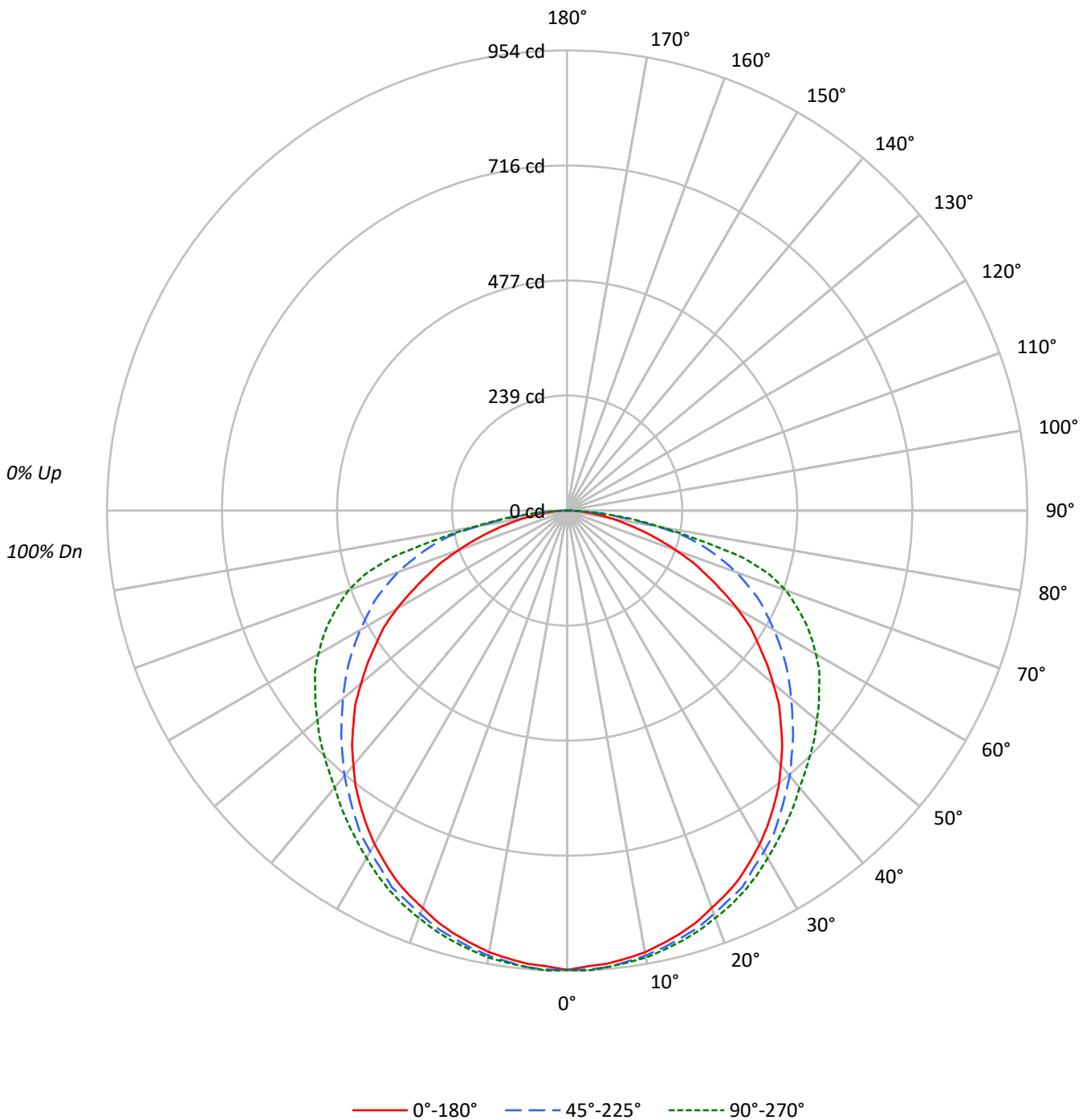
Input Watts (W): 36.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	2562	2562	2562
5°	2548	2566	2566
10°	2541	2559	2572
15°	2528	2554	2572
20°	2510	2548	2574
25°	2503	2556	2582
30°	2481	2536	2585
35°	2454	2528	2601
40°	2421	2523	2632
45°	2385	2520	2716
50°	2334	2539	2829
55°	2270	2595	2992
60°	2196	2665	3204
65°	2045	2797	3465
70°	1877	2930	3790
75°	1646	3084	3919
80°	1416	2938	3076
85°	1238	2133	2340



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	3.0
10°-20°	258.6	8.5
20°-30°	394.6	13.0
30°-40°	481.8	15.9
40°-50°	515.1	17.0
50°-60°	497.2	16.4
60°-70°	428.0	14.1
70°-80°	289.6	9.6
80°-90°	76.4	2.5
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°	743.3	24.5
0°-40°	1225.1	40.4
0°-60°	2237.5	73.8
0°-90°	3031.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3031.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	943	946	950	950	950	90
15°	908	910	917	921	923	256
25°	843	847	861	865	870	388
35°	747	754	769	785	792	467
45°	627	638	662	696	714	484
55°	484	500	553	609	638	434
65°	321	352	439	508	544	319
75°	158	210	297	357	377	170
85°	40	56	69	71	76	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	952.2	952.2	952.2	952.2	952.2
2.5°	945.6	947.8	952.2	952.2	954.5
5°	943.3	945.6	950.0	950.0	950.0
7.5°	936.6	938.9	943.3	945.6	945.6
10°	929.9	932.2	936.6	938.9	941.1
12.5°	918.8	921.0	927.7	932.2	932.2
15°	907.6	909.9	916.6	921.0	923.3
17.5°	894.3	898.7	905.4	909.9	912.1
20°	876.4	880.9	889.8	896.5	898.7
22.5°	860.8	865.3	874.2	880.9	885.3
25°	843.0	847.4	860.8	865.3	869.7
27.5°	820.7	825.1	836.3	845.2	851.9
30°	798.4	802.8	816.2	827.4	831.8
32.5°	773.8	780.5	796.1	805.1	811.8
35°	747.1	753.8	769.4	785.0	791.7
37.5°	720.3	727.0	742.6	762.7	771.6
40°	689.1	698.0	718.1	744.8	749.3
42.5°	660.1	671.3	689.1	720.3	731.5
45°	626.7	637.8	662.3	695.8	713.6
47.5°	595.4	606.6	633.3	673.5	695.8
50°	557.5	573.1	606.6	653.4	675.7
52.5°	521.8	535.2	579.8	631.1	657.9
55°	483.9	499.5	553.1	608.8	637.8
57.5°	450.5	463.9	524.1	586.5	620.0
60°	408.1	425.9	495.1	562.0	595.4
62.5°	363.5	390.3	466.1	535.2	570.9
65°	321.1	352.4	439.3	508.5	544.1
67.5°	283.2	316.7	405.9	479.5	512.9
70°	238.6	281.0	372.4	443.8	481.7
72.5°	198.5	245.3	334.5	405.9	439.3
75°	158.3	209.6	296.6	356.8	376.9
77.5°	122.7	171.7	254.2	272.1	274.3
80°	91.4	136.0	189.6	191.8	198.5
82.5°	62.4	95.9	122.7	133.8	136.0
85°	40.1	55.8	69.1	71.4	75.8
87.5°	17.8	20.1	24.5	22.3	22.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)