

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: P390150

Luminaire Tested: **22CZ2-20VHE-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: P390150  
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: 22CZ2-20VHE-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: 1194.7 lumens  
Efficiency: N/A  
Efficacy: 84.1 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

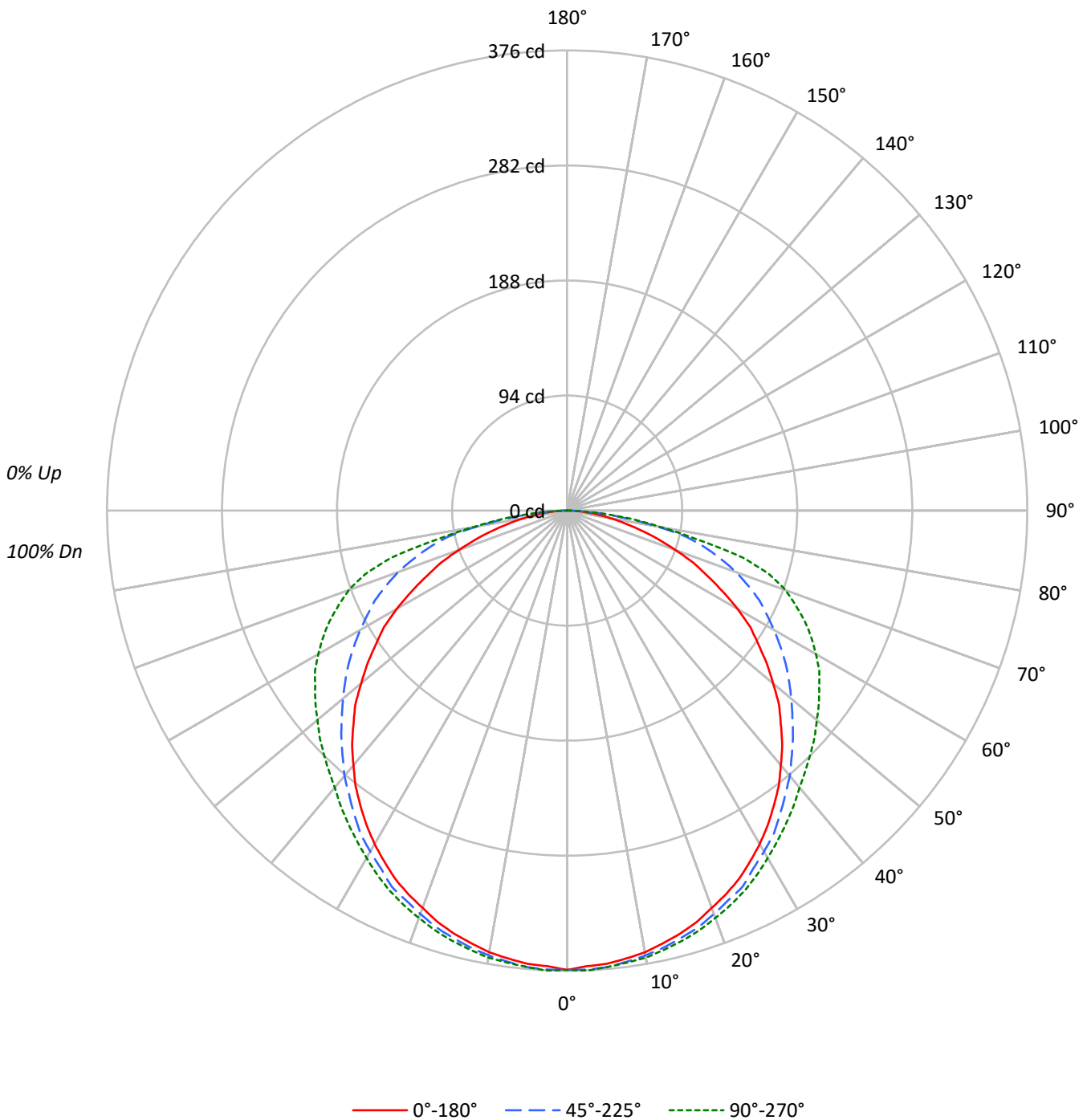
Input Watts (W): 14.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1010	1010	1010
5°	1004	1011	1011
10°	1001	1009	1013
15°	997	1006	1014
20°	989	1004	1014
25°	986	1007	1018
30°	978	1000	1019
35°	967	996	1025
40°	954	994	1037
45°	940	993	1070
50°	920	1001	1115
55°	895	1023	1179
60°	865	1050	1263
65°	806	1102	1365
70°	740	1155	1493
75°	649	1215	1544
80°	558	1158	1212
85°	488	840	923



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.5	3.0
10°-20°	101.9	8.5
20°-30°	155.5	13.0
30°-40°	189.9	15.9
40°-50°	203.0	17.0
50°-60°	196.0	16.4
60°-70°	168.7	14.1
70°-80°	114.1	9.6
80°-90°	30.1	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°	292.9	24.5
0°-40°	482.8	40.4
0°-60°	881.8	73.8
0°-90°	1194.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1194.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	375	375	375	375	375	
5°	372	373	374	374	374	35
15°	358	359	361	363	364	101
25°	332	334	339	341	343	153
35°	294	297	303	309	312	184
45°	247	251	261	274	281	191
55°	191	197	218	240	251	171
65°	127	139	173	200	214	126
75°	62	83	117	141	148	67
85°	16	22	27	28	30	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	375.3	375.3	375.3	375.3	375.3
2.5°	372.6	373.5	375.3	375.3	376.2
5°	371.8	372.6	374.4	374.4	374.4
7.5°	369.1	370.0	371.8	372.6	372.6
10°	366.5	367.4	369.1	370.0	370.9
12.5°	362.1	363.0	365.6	367.4	367.4
15°	357.7	358.6	361.2	363.0	363.9
17.5°	352.4	354.2	356.8	358.6	359.5
20°	345.4	347.2	350.7	353.3	354.2
22.5°	339.2	341.0	344.5	347.2	348.9
25°	332.2	334.0	339.2	341.0	342.8
27.5°	323.4	325.2	329.6	333.1	335.7
30°	314.6	316.4	321.7	326.1	327.8
32.5°	305.0	307.6	313.8	317.3	319.9
35°	294.4	297.1	303.2	309.4	312.0
37.5°	283.9	286.5	292.7	300.6	304.1
40°	271.6	275.1	283.0	293.5	295.3
42.5°	260.1	264.5	271.6	283.9	288.3
45°	247.0	251.4	261.0	274.2	281.2
47.5°	234.7	239.1	249.6	265.4	274.2
50°	219.7	225.9	239.1	257.5	266.3
52.5°	205.7	210.9	228.5	248.7	259.3
55°	190.7	196.9	218.0	239.9	251.4
57.5°	177.5	182.8	206.5	231.1	244.3
60°	160.8	167.9	195.1	221.5	234.7
62.5°	143.3	153.8	183.7	210.9	225.0
65°	126.6	138.9	173.1	200.4	214.4
67.5°	111.6	124.8	160.0	189.0	202.1
70°	94.0	110.7	146.8	174.9	189.8
72.5°	78.2	96.7	131.8	160.0	173.1
75°	62.4	82.6	116.9	140.6	148.5
77.5°	48.3	67.7	100.2	107.2	108.1
80°	36.0	53.6	74.7	75.6	78.2
82.5°	24.6	37.8	48.3	52.7	53.6
85°	15.8	22.0	27.2	28.1	29.9
87.5°	7.0	7.9	9.7	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)