

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: P389096

Luminaire Tested: **22CZ2-100VHE-S-UNV-L950-CD1-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: P389096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-S-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9630.0 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

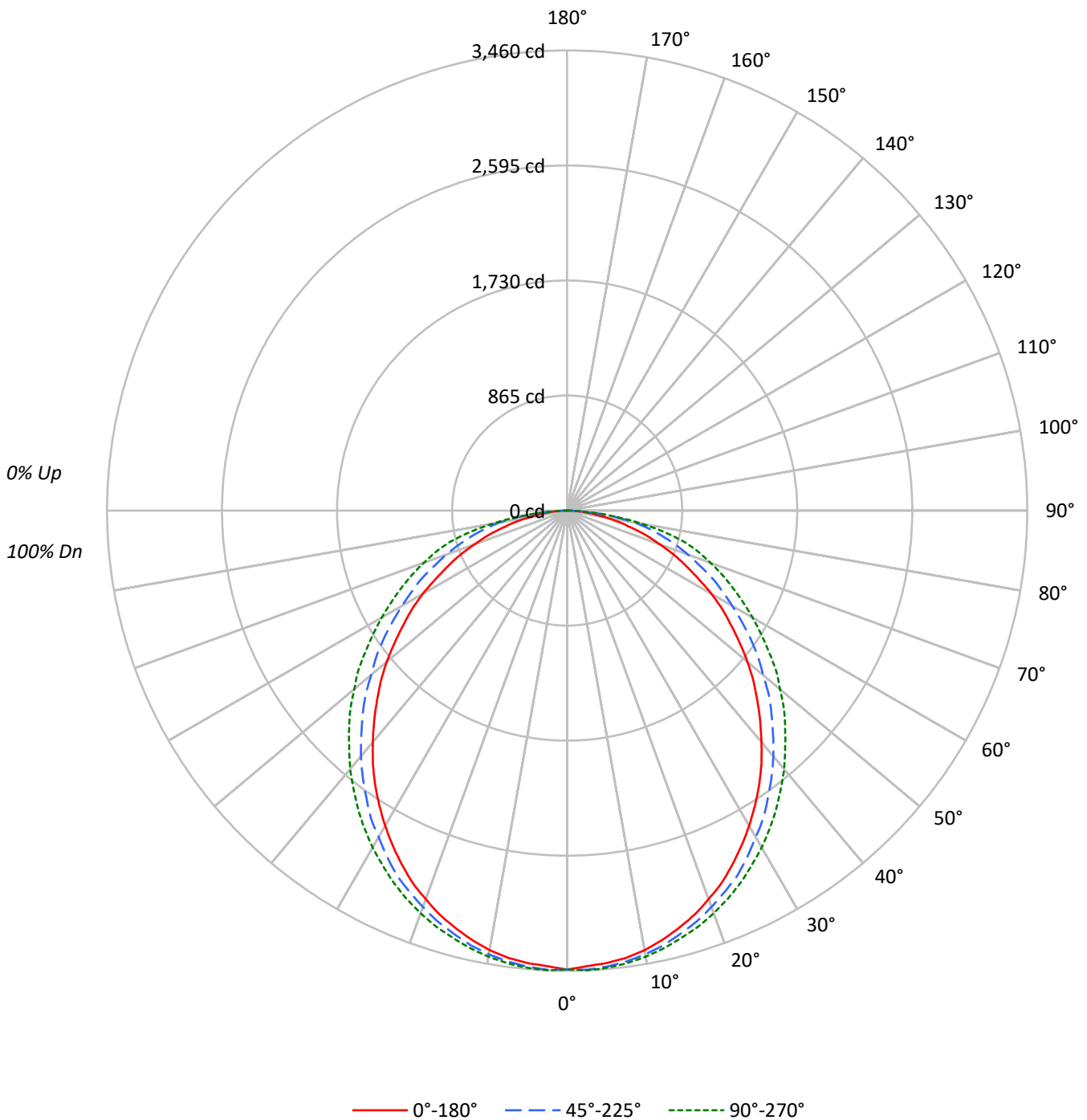
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	103	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	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9286	9286	9286
5°	9224	9297	9321
10°	9171	9257	9306
15°	9050	9175	9263
20°	8904	9084	9226
25°	8725	8992	9165
30°	8502	8810	9089
35°	8266	8650	9004
40°	7986	8476	8918
45°	7695	8276	8823
50°	7411	8051	8747
55°	7062	7905	8685
60°	6747	7714	8657
65°	6294	7668	8755
70°	5798	7600	9014
75°	5232	7708	9483
80°	4527	7937	8912
85°	3745	6660	6660



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.3	3.4
10°-20°	928.7	9.6
20°-30°	1389.5	14.4
30°-40°	1645.6	17.1
40°-50°	1677.0	17.4
50°-60°	1503.1	15.6
60°-70°	1176.8	12.2
70°-80°	758.8	7.9
80°-90°	224.2	2.3
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°	2644.5	27.5
0°-40°	4290.1	44.5
0°-60°	7470.2	77.6
0°-90°	9630.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9630.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3451	3451	3451	3451	3451	
5°	3415	3424	3442	3446	3451	324
15°	3248	3266	3294	3320	3325	916
25°	2938	2966	3028	3069	3087	1353
35°	2516	2548	2633	2714	2741	1573
45°	2022	2067	2175	2287	2318	1561
55°	1505	1555	1685	1802	1851	1350
65°	988	1047	1204	1321	1375	982
75°	503	580	741	867	912	540
85°	121	166	216	216	216	142
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3450.7	3450.7	3450.7	3450.7	3450.7
2.5°	3428.3	3437.2	3455.2	3459.7	3459.7
5°	3414.8	3423.8	3441.7	3446.2	3450.7
7.5°	3392.3	3396.8	3419.3	3428.3	3432.8
10°	3356.4	3365.4	3387.8	3401.3	3405.8
12.5°	3306.9	3320.4	3347.4	3365.4	3369.9
15°	3248.5	3266.5	3293.5	3320.4	3324.9
17.5°	3185.6	3203.6	3239.6	3271.0	3280.0
20°	3109.3	3131.7	3172.2	3208.1	3221.6
22.5°	3032.9	3050.8	3100.3	3145.2	3158.7
25°	2938.5	2965.5	3028.4	3068.8	3086.8
27.5°	2839.7	2871.1	2934.0	2987.9	3005.9
30°	2736.3	2767.8	2835.2	2902.6	2925.0
32.5°	2628.5	2664.4	2745.3	2812.7	2835.2
35°	2516.2	2547.6	2633.0	2713.9	2740.8
37.5°	2399.3	2426.3	2525.1	2610.5	2637.5
40°	2273.5	2309.5	2412.8	2511.7	2538.6
42.5°	2147.7	2188.2	2291.5	2399.3	2426.3
45°	2021.9	2066.8	2174.7	2287.0	2318.5
47.5°	1900.6	1936.5	2057.9	2165.7	2210.6
50°	1770.3	1806.2	1923.1	2044.4	2089.3
52.5°	1635.5	1684.9	1810.7	1927.6	1981.5
55°	1505.2	1554.6	1684.9	1801.7	1851.2
57.5°	1383.9	1424.3	1559.1	1680.4	1729.9
60°	1253.6	1289.5	1433.3	1563.6	1608.5
62.5°	1114.3	1168.2	1316.5	1437.8	1491.7
65°	988.5	1046.9	1204.2	1321.0	1374.9
67.5°	871.7	925.6	1078.4	1204.2	1262.6
70°	736.9	808.8	966.0	1091.8	1145.7
72.5°	629.0	691.9	853.7	979.5	1037.9
75°	503.2	579.6	741.4	867.2	912.1
77.5°	399.9	476.3	629.0	727.9	750.4
80°	292.1	368.4	512.2	561.6	575.1
82.5°	197.7	269.6	368.4	381.9	386.4
85°	121.3	166.2	215.7	215.7	215.7
87.5°	58.4	67.4	76.4	71.9	71.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)