

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: P389095

Luminaire Tested: **22CZ2-100VHE-S-UNV-L950-CD1-SWPD1-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: P389095  
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-SWPD1-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: 9510.5 lumens  
Efficiency: N/A  
Efficacy: 122.4 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

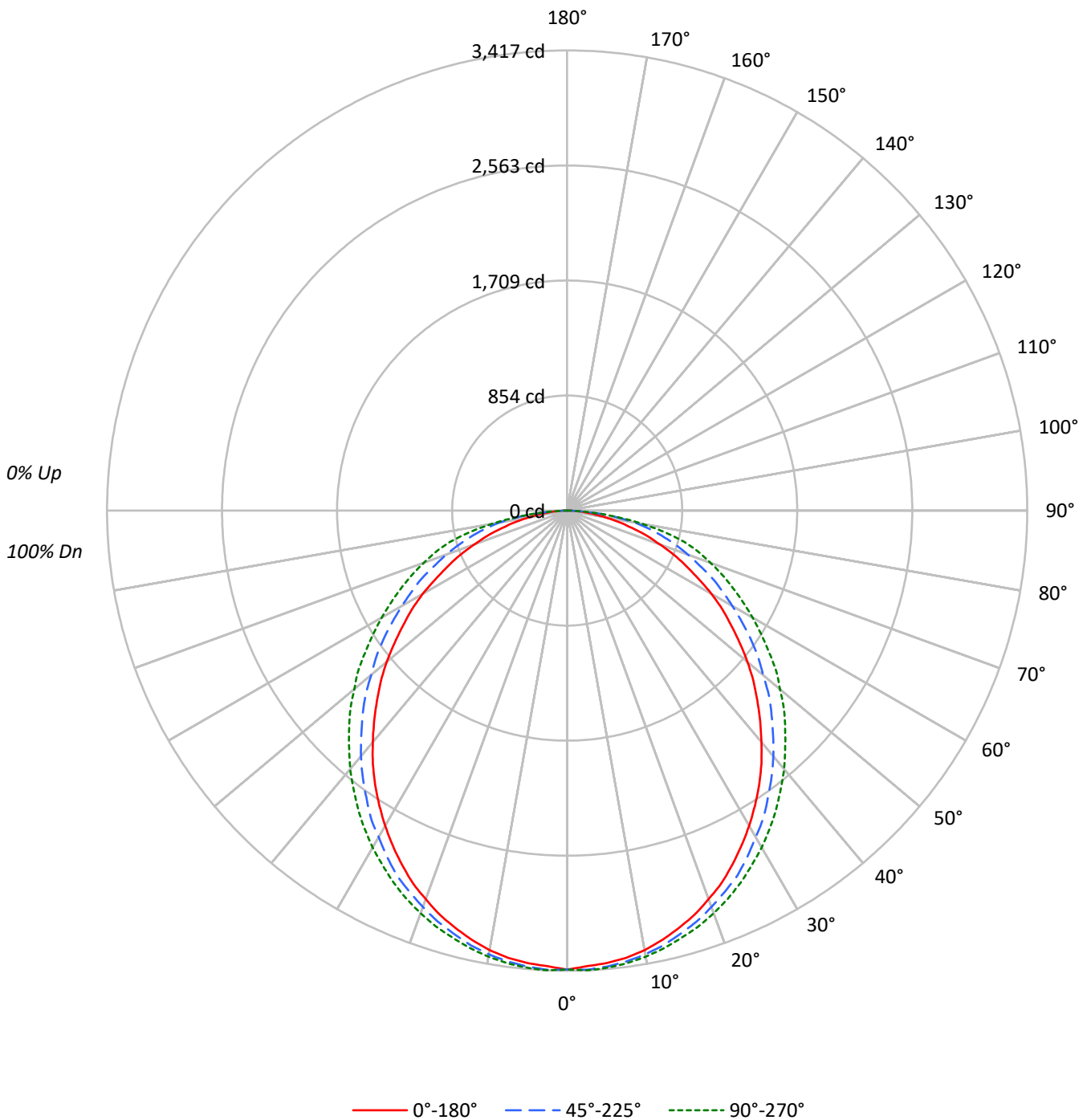
Input Watts (W): 77.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	9171	9171	9171
5°	9110	9182	9206
10°	9057	9142	9191
15°	8938	9061	9148
20°	8794	8971	9111
25°	8617	8880	9052
30°	8397	8700	8976
35°	8163	8542	8892
40°	7887	8371	8807
45°	7599	8173	8714
50°	7319	7951	8638
55°	6974	7807	8577
60°	6663	7618	8550
65°	6216	7572	8646
70°	5725	7506	8903
75°	5167	7613	9366
80°	4469	7840	8802
85°	3699	6576	6576



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.3	3.4
10°-20°	917.2	9.6
20°-30°	1372.3	14.4
30°-40°	1625.1	17.1
40°-50°	1656.2	17.4
50°-60°	1484.4	15.6
60°-70°	1162.2	12.2
70°-80°	749.4	7.9
80°-90°	221.4	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°	2611.7	27.5
0°-40°	4236.9	44.5
0°-60°	7377.5	77.6
0°-90°	9510.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9510.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3408	3408	3408	3408	3408	
5°	3372	3381	3399	3404	3408	320
15°	3208	3226	3253	3279	3284	905
25°	2902	2929	2991	3031	3048	1336
35°	2485	2516	2600	2680	2707	1553
45°	1997	2041	2148	2259	2290	1542
55°	1486	1535	1664	1779	1828	1333
65°	976	1034	1189	1305	1358	970
75°	497	572	732	856	901	533
85°	120	164	213	213	213	141
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3407.9	3407.9	3407.9	3407.9	3407.9
2.5°	3385.7	3394.6	3412.3	3416.8	3416.8
5°	3372.4	3381.3	3399.0	3403.5	3407.9
7.5°	3350.2	3354.7	3376.8	3385.7	3390.2
10°	3314.7	3323.6	3345.8	3359.1	3363.5
12.5°	3265.9	3279.2	3305.8	3323.6	3328.0
15°	3208.2	3226.0	3252.6	3279.2	3283.7
17.5°	3146.1	3163.9	3199.4	3230.4	3239.3
20°	3070.7	3092.9	3132.8	3168.3	3181.6
22.5°	2995.2	3013.0	3061.8	3106.2	3119.5
25°	2902.0	2928.7	2990.8	3030.7	3048.5
27.5°	2804.4	2835.5	2897.6	2950.9	2968.6
30°	2702.4	2733.4	2800.0	2866.5	2888.7
32.5°	2595.9	2631.4	2711.2	2777.8	2800.0
35°	2484.9	2516.0	2600.3	2680.2	2706.8
37.5°	2369.6	2396.2	2493.8	2578.1	2604.7
40°	2245.3	2280.8	2382.9	2480.5	2507.1
42.5°	2121.1	2161.0	2263.1	2369.6	2396.2
45°	1996.8	2041.2	2147.7	2258.6	2289.7
47.5°	1877.0	1912.5	2032.3	2138.8	2183.2
50°	1748.3	1783.8	1899.2	2019.0	2063.4
52.5°	1615.2	1664.0	1788.3	1903.6	1956.9
55°	1486.5	1535.3	1664.0	1779.4	1828.2
57.5°	1366.7	1406.6	1539.8	1659.6	1708.4
60°	1238.0	1273.5	1415.5	1544.2	1588.6
62.5°	1100.5	1153.7	1300.2	1420.0	1473.2
65°	976.2	1033.9	1189.2	1304.6	1357.8
67.5°	860.9	914.1	1065.0	1189.2	1246.9
70°	727.7	798.7	954.0	1078.3	1131.5
72.5°	621.2	683.4	843.1	967.3	1025.0
75°	497.0	572.4	732.2	856.4	900.8
77.5°	394.9	470.4	621.2	718.9	741.0
80°	288.4	363.9	505.9	554.7	568.0
82.5°	195.2	266.2	363.9	377.2	381.6
85°	119.8	164.2	213.0	213.0	213.0
87.5°	57.7	66.6	75.4	71.0	71.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)