

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: P387801

Luminaire Tested: **22CZ2-29HE-SQR-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: P387801  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29HE-SQR-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2499.5 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

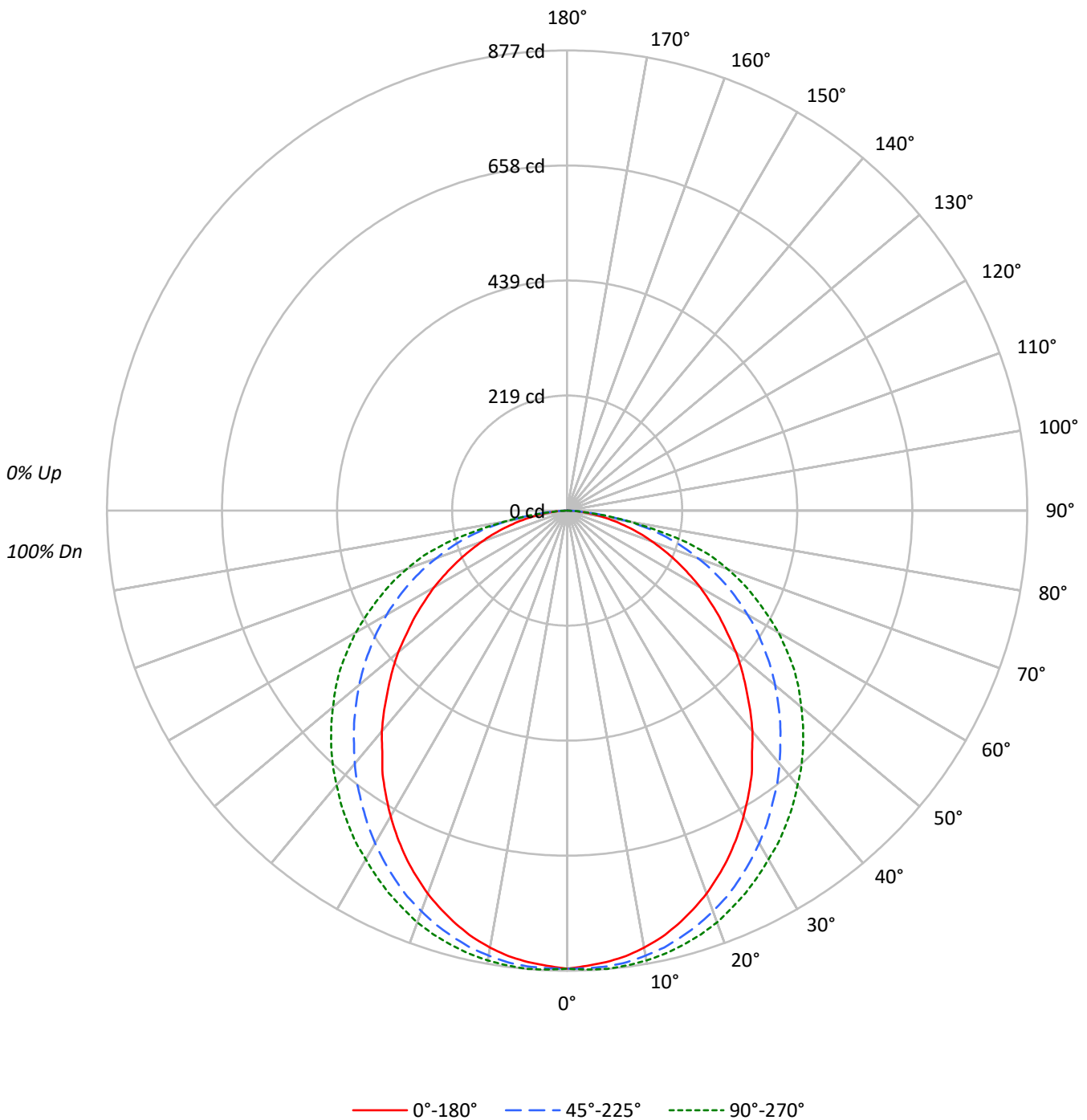
Input Watts (W): 22.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2349	2349	2349
5°	2333	2355	2368
10°	2311	2353	2379
15°	2274	2343	2386
20°	2225	2327	2392
25°	2163	2304	2388
30°	2090	2275	2385
35°	2015	2241	2393
40°	1930	2213	2400
45°	1837	2185	2420
50°	1758	2165	2439
55°	1664	2148	2477
60°	1577	2139	2503
65°	1473	2123	2523
70°	1353	2090	2558
75°	1221	2035	2467
80°	1048	1802	1857
85°	843	1062	843



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.8	3.3
10°-20°	236.7	9.5
20°-30°	355.5	14.2
30°-40°	423.9	17.0
40°-50°	438.3	17.5
50°-60°	403.0	16.1
60°-70°	320.8	12.8
70°-80°	196.0	7.8
80°-90°	42.6	1.7
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°	674.9	27.0
0°-40°	1098.8	44.0
0°-60°	1940.1	77.6
0°-90°	2499.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2499.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	864	866	872	876	877	82
15°	816	826	841	853	856	230
25°	728	746	776	797	804	335
35°	613	639	682	718	728	383
45°	483	517	574	620	636	373
55°	355	394	458	510	528	317
65°	231	270	333	380	396	229
75°	117	152	196	230	237	125
85°	27	33	34	30	27	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	873.1	873.1	873.1	873.1	873.1
2.5°	868.4	869.6	873.1	875.5	875.5
5°	863.6	866.0	871.9	875.5	876.7
7.5°	856.5	860.1	868.4	873.1	874.3
10°	845.9	850.6	861.3	868.4	870.8
12.5°	832.8	839.9	853.0	862.5	864.8
15°	816.2	825.7	841.1	853.0	856.5
17.5°	797.2	809.1	828.1	842.3	847.0
20°	777.0	788.9	812.6	829.2	835.2
22.5°	753.3	768.7	796.0	815.0	819.8
25°	728.4	746.2	775.9	797.2	804.3
27.5°	701.1	722.5	754.5	780.6	786.5
30°	672.6	695.2	732.0	760.4	767.6
32.5°	643.0	669.1	708.2	740.3	749.8
35°	613.3	639.4	682.1	717.7	728.4
37.5°	578.9	609.8	657.2	694.0	707.0
40°	549.3	578.9	629.9	670.3	683.3
42.5°	516.1	548.1	601.5	645.4	660.8
45°	482.8	517.2	574.2	620.4	635.9
47.5°	452.0	486.4	545.7	594.3	609.8
50°	420.0	455.5	517.2	567.1	582.5
52.5°	385.6	424.7	488.8	538.6	556.4
55°	354.7	393.9	457.9	510.1	527.9
57.5°	322.7	363.0	429.4	479.3	495.9
60°	293.0	332.2	397.4	446.1	465.0
62.5°	261.0	301.3	365.4	412.8	430.6
65°	231.3	270.5	333.4	379.6	396.2
67.5°	201.7	240.8	300.1	344.0	363.0
70°	172.0	211.2	265.7	308.4	325.1
72.5°	145.9	180.3	232.5	271.7	287.1
75°	117.4	151.8	195.7	230.1	237.3
77.5°	91.3	122.2	159.0	174.4	176.8
80°	67.6	91.3	116.3	119.8	119.8
82.5°	45.1	62.9	72.4	73.6	72.4
85°	27.3	33.2	34.4	29.7	27.3
87.5°	9.5	9.5	5.9	3.6	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)