

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: P388255

Luminaire Tested: **22CZ2-29VHE-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: P388255  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29VHE-UNV-L950-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2788.5 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

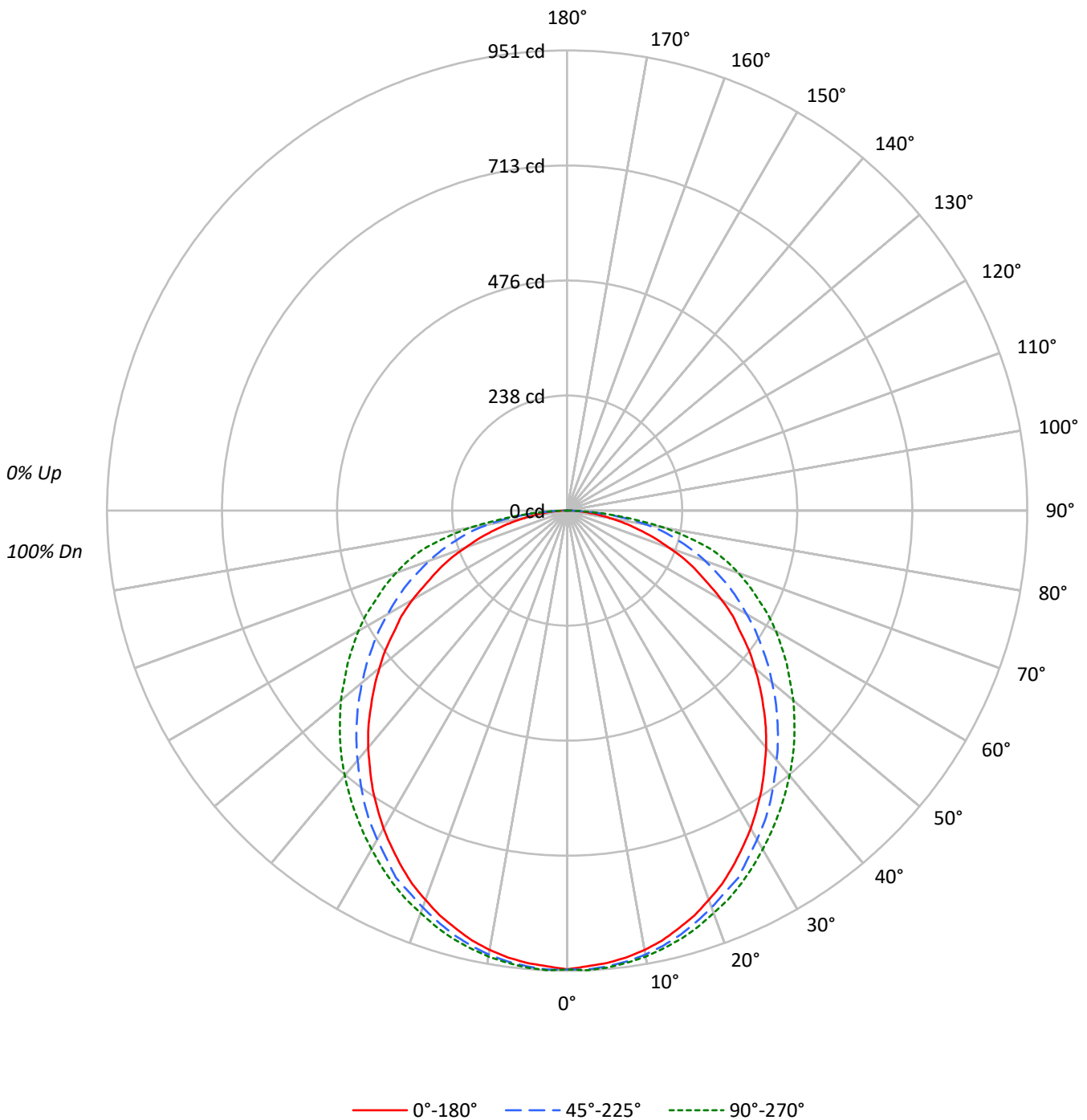
Input Watts (W): 21.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25

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

	0°	45°	90°
0°	2551	2551	2551
5°	2535	2554	2561
10°	2520	2546	2557
15°	2489	2527	2550
20°	2452	2499	2534
25°	2408	2485	2526
30°	2358	2439	2511
35°	2303	2407	2506
40°	2246	2367	2511
45°	2183	2339	2527
50°	2120	2315	2556
55°	2047	2305	2601
60°	1986	2304	2681
65°	1887	2341	2778
70°	1760	2386	2958
75°	1613	2468	3196
80°	1404	2572	3147
85°	1229	2288	2501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	3.2
10°-20°	255.4	9.2
20°-30°	383.4	13.7
30°-40°	458.1	16.4
40°-50°	476.4	17.1
50°-60°	441.5	15.8
60°-70°	362.2	13.0
70°-80°	244.8	8.8
80°-90°	76.9	2.8
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°	728.5	26.1
0°-40°	1186.6	42.6
0°-60°	2104.6	75.5
0°-90°	2788.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2788.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	938	940	945	947	948	89
15°	893	897	907	912	915	252
25°	811	818	837	847	851	373
35°	701	711	733	755	763	438
45°	574	584	615	650	664	443
55°	436	450	491	535	554	392
65°	296	313	368	416	436	293
75°	155	181	237	285	307	164
85°	40	55	74	82	81	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	948.1	948.1	948.1	948.1	948.1
2.5°	942.7	945.4	949.5	950.9	950.9
5°	938.5	939.9	945.4	946.8	948.1
7.5°	931.7	934.4	939.9	941.3	942.7
10°	922.1	924.8	931.7	934.4	935.8
12.5°	909.7	912.5	920.7	924.8	926.2
15°	893.3	897.4	907.0	912.5	915.2
17.5°	876.8	880.9	890.5	898.7	901.5
20°	856.2	865.8	872.7	883.7	885.0
22.5°	835.6	841.1	853.5	864.4	869.9
25°	810.9	817.8	837.0	846.6	850.7
27.5°	784.9	794.5	809.6	824.6	830.1
30°	758.8	765.6	784.9	802.7	808.2
32.5°	730.0	739.6	760.2	778.0	786.2
35°	701.2	710.8	732.7	754.7	762.9
37.5°	669.6	680.6	702.5	728.6	739.6
40°	639.4	647.6	673.7	705.3	714.9
42.5°	607.9	617.5	644.9	679.2	690.2
45°	573.6	584.5	614.7	650.4	664.1
47.5°	540.6	551.6	584.5	620.2	636.7
50°	506.3	520.0	553.0	594.1	610.6
52.5°	473.4	485.7	522.8	565.3	580.4
55°	436.3	450.1	491.2	535.1	554.3
57.5°	406.2	415.8	461.0	506.3	525.5
60°	369.1	381.5	428.1	476.1	498.1
62.5°	329.3	349.9	397.9	447.3	469.3
65°	296.4	312.8	367.7	415.8	436.3
67.5°	262.1	279.9	333.4	384.2	407.5
70°	223.7	247.0	303.2	354.0	376.0
72.5°	189.4	214.1	271.7	321.1	344.4
75°	155.1	181.1	237.4	285.4	307.4
77.5°	122.1	150.9	205.8	242.9	256.6
80°	90.6	118.0	166.0	192.1	203.1
82.5°	63.1	86.4	122.1	135.8	138.6
85°	39.8	54.9	74.1	82.3	81.0
87.5°	17.8	22.0	27.4	30.2	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)