

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: P388328

Luminaire Tested: **22CZ2-44VHE-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: P388328  
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: 22CZ2-44VHE-UNV-L950-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

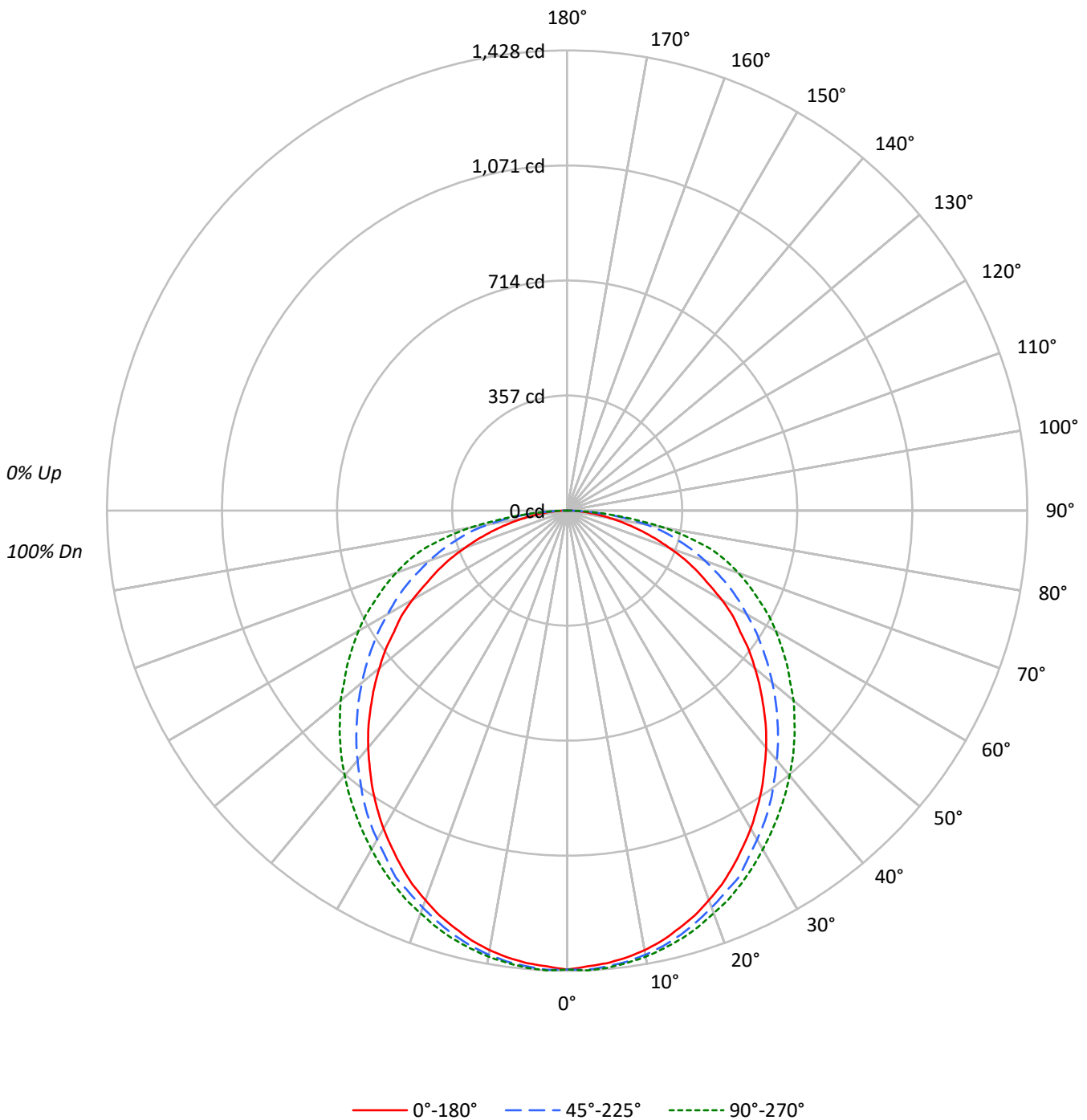
Lumens per Lamp: N/A  
Luminaire Lumens: 4189.0 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.6  
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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	3833	3833	3833
5°	3809	3836	3847
10°	3785	3824	3841
15°	3738	3796	3830
20°	3683	3754	3807
25°	3617	3733	3795
30°	3542	3663	3773
35°	3460	3616	3765
40°	3374	3555	3772
45°	3279	3514	3797
50°	3184	3478	3840
55°	3075	3462	3907
60°	2984	3461	4027
65°	2835	3517	4174
70°	2644	3584	4444
75°	2421	3708	4800
80°	2108	3865	4728
85°	1846	3436	3754



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.7	3.2
10°-20°	383.7	9.2
20°-30°	576.0	13.7
30°-40°	688.2	16.4
40°-50°	715.7	17.1
50°-60°	663.3	15.8
60°-70°	544.1	13.0
70°-80°	367.8	8.8
80°-90°	115.6	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°	1094.4	26.1
0°-40°	1782.6	42.6
0°-60°	3161.5	75.5
0°-90°	4189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4189.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1424	1424	1424	1424	1424	
5°	1410	1412	1420	1422	1424	134
15°	1342	1348	1362	1371	1375	379
25°	1218	1228	1257	1272	1278	561
35°	1053	1068	1101	1134	1146	658
45°	862	878	923	977	998	665
55°	656	676	738	804	833	589
65°	445	470	552	625	656	440
75°	233	272	357	429	462	247
85°	60	82	111	124	122	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1424.3	1424.3	1424.3	1424.3	1424.3
2.5°	1416.1	1420.2	1426.4	1428.5	1428.5
5°	1409.9	1412.0	1420.2	1422.3	1424.3
7.5°	1399.6	1403.7	1412.0	1414.0	1416.1
10°	1385.2	1389.3	1399.6	1403.7	1405.8
12.5°	1366.6	1370.7	1383.1	1389.3	1391.4
15°	1341.9	1348.1	1362.5	1370.7	1374.9
17.5°	1317.2	1323.3	1337.8	1350.1	1354.3
20°	1286.2	1300.7	1311.0	1327.5	1329.5
22.5°	1255.3	1263.6	1282.1	1298.6	1306.8
25°	1218.2	1228.5	1257.4	1271.8	1278.0
27.5°	1179.0	1193.5	1216.1	1238.8	1247.1
30°	1139.9	1150.2	1179.0	1205.8	1214.1
32.5°	1096.6	1111.0	1141.9	1168.7	1181.1
35°	1053.3	1067.7	1100.7	1133.7	1146.1
37.5°	1005.9	1022.4	1055.4	1094.5	1111.0
40°	960.6	972.9	1012.1	1059.5	1073.9
42.5°	913.1	927.6	968.8	1020.3	1036.8
45°	861.6	878.1	923.4	977.0	997.7
47.5°	812.1	828.6	878.1	931.7	956.4
50°	760.6	781.2	830.7	892.5	917.3
52.5°	711.1	729.7	785.3	849.2	871.9
55°	655.5	676.1	737.9	803.9	832.8
57.5°	610.1	624.6	692.6	760.6	789.5
60°	554.5	573.0	643.1	715.3	748.2
62.5°	494.7	525.6	597.8	672.0	705.0
65°	445.2	470.0	552.4	624.6	655.5
67.5°	393.7	420.5	500.9	577.2	612.2
70°	336.0	371.0	455.5	531.8	564.8
72.5°	284.5	321.6	408.1	482.3	517.4
75°	232.9	272.1	356.6	428.7	461.7
77.5°	183.5	226.7	309.2	364.8	385.5
80°	136.0	177.3	249.4	288.6	305.1
82.5°	94.8	129.9	183.5	204.1	208.2
85°	59.8	82.5	111.3	123.7	121.6
87.5°	26.8	33.0	41.2	45.3	43.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)