

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: P391688

Luminaire Tested: **24CZ2-75VHE-RDP-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: P391688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-RDP-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4672.4 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

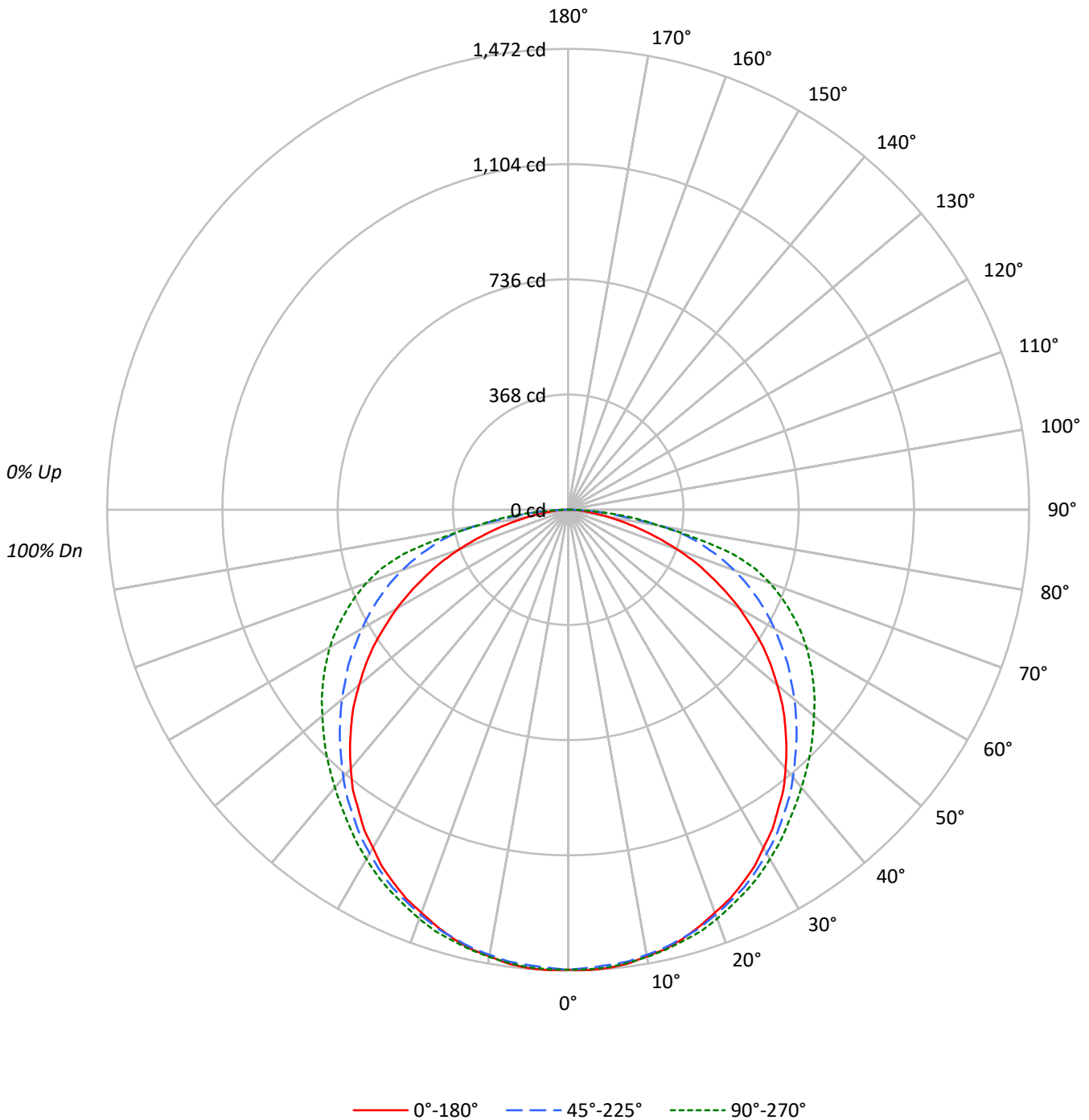
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1977	1977	1977
5°	1984	1972	1981
10°	1979	1973	1982
15°	1976	1972	1985
20°	1961	1971	1991
25°	1954	1975	1996
30°	1937	1970	2002
35°	1919	1964	2010
40°	1897	1962	2035
45°	1865	1962	2081
50°	1824	1974	2144
55°	1778	2006	2240
60°	1703	2046	2364
65°	1594	2117	2509
70°	1450	2216	2699
75°	1229	2337	2819
80°	969	2352	2280
85°	716	1789	2004



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.4	3.0
10°-20°	401.1	8.6
20°-30°	613.4	13.1
30°-40°	749.9	16.0
40°-50°	799.2	17.1
50°-60°	764.2	16.4
60°-70°	647.4	13.9
70°-80°	435.1	9.3
80°-90°	122.7	2.6
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°	1153.9	24.7
0°-40°	1903.8	40.7
0°-60°	3467.3	74.2
0°-90°	4672.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4672.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1469	1467	1460	1467	1467	140
15°	1418	1418	1416	1428	1425	400
25°	1316	1321	1330	1342	1344	607
35°	1168	1177	1196	1219	1224	732
45°	980	997	1031	1075	1094	756
55°	758	786	855	922	955	675
65°	501	552	665	753	788	497
75°	236	322	450	526	542	253
85°	46	95	116	125	130	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.3	1469.3	1469.3	1469.3	1469.3
2.5°	1471.7	1471.7	1464.7	1469.3	1469.3
5°	1469.3	1467.0	1460.1	1467.0	1467.0
7.5°	1462.4	1460.1	1455.4	1462.4	1460.1
10°	1448.5	1448.5	1443.8	1450.8	1450.8
12.5°	1436.9	1434.6	1432.3	1441.5	1439.2
15°	1418.3	1418.3	1416.0	1427.6	1425.3
17.5°	1395.2	1397.5	1399.8	1409.1	1411.4
20°	1369.7	1374.3	1376.6	1390.5	1390.5
22.5°	1346.5	1348.8	1353.5	1367.4	1367.4
25°	1316.4	1321.0	1330.3	1341.9	1344.2
27.5°	1286.2	1288.6	1300.2	1316.4	1318.7
30°	1246.9	1253.8	1267.7	1286.2	1288.6
32.5°	1212.1	1219.0	1235.3	1253.8	1258.4
35°	1168.1	1177.3	1195.9	1219.0	1223.7
37.5°	1128.7	1135.6	1158.8	1184.3	1191.2
40°	1080.0	1093.9	1117.1	1147.2	1158.8
42.5°	1031.3	1045.2	1073.0	1112.4	1126.3
45°	980.3	996.6	1031.3	1075.4	1093.9
47.5°	929.3	947.9	987.3	1038.3	1059.1
50°	871.4	894.6	943.2	1001.2	1024.4
52.5°	815.8	843.6	896.9	961.8	991.9
55°	757.8	785.7	855.2	922.4	954.8
57.5°	693.0	730.0	806.5	883.0	917.8
60°	632.7	667.5	760.2	843.6	878.4
62.5°	567.8	614.2	713.8	801.9	836.6
65°	500.6	551.6	665.1	753.2	788.0
67.5°	440.3	496.0	616.5	704.5	739.3
70°	368.5	438.0	563.2	651.2	686.0
72.5°	301.3	377.8	507.5	593.3	625.7
75°	236.4	322.1	449.6	526.1	542.3
77.5°	176.1	266.5	389.4	421.8	410.2
80°	125.1	213.2	303.6	287.4	294.3
82.5°	81.1	162.2	187.7	213.2	220.2
85°	46.4	95.0	115.9	125.1	129.8
87.5°	20.9	34.8	46.4	46.4	44.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)