

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: P391684

Luminaire Tested: **24CZ2-75VHE-RDP-UNV-L940-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: P391684
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-L940-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4347.4 lumens
Efficiency: N/A
Efficacy: 87.1 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

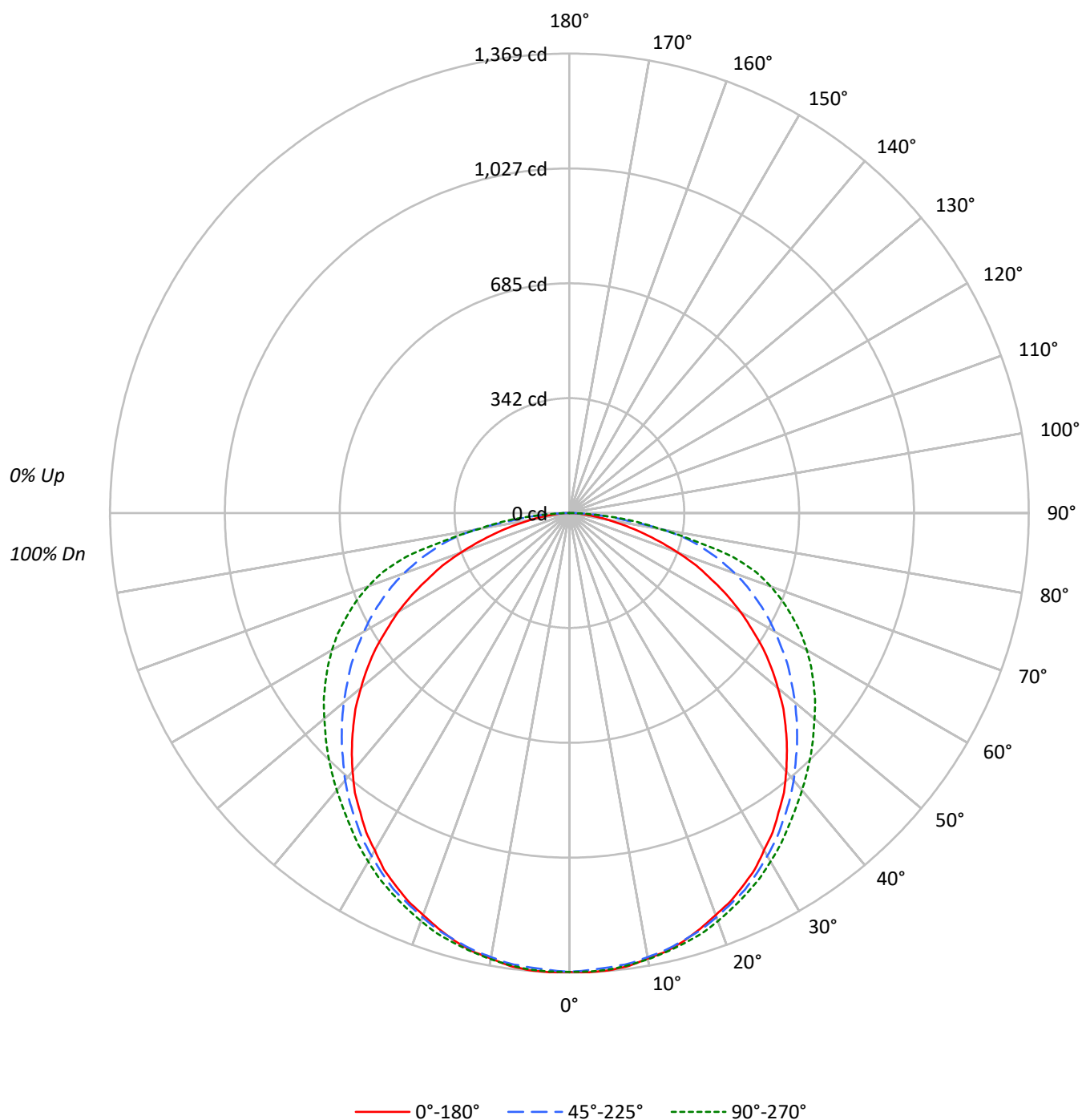
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	100	96	92		96	93	89		92	89	87		88	86	84
2	97	89	81	75	95	87	80	74		83	77	72		80	75	71		77	73	69
3	88	77	68	62	86	76	67	61		72	66	60		70	64	59		67	62	58
4	81	68	59	52	78	67	58	51		64	57	51		62	55	50		59	54	49
5	74	60	51	44	72	59	51	44		57	49	43		55	48	43		53	47	42
6	68	54	45	38	66	53	45	38		51	44	38		50	43	37		48	42	37
7	63	49	40	34	61	48	40	34		47	39	33		45	38	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		41	34	29		40	34	29
9	55	41	33	27	53	40	32	27		39	32	27		38	31	26		37	31	26
10	51	38	30	24	50	37	29	24		36	29	24		35	29	24		34	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1839	1839	1839
5°	1846	1835	1844
10°	1841	1835	1844
15°	1838	1835	1847
20°	1825	1834	1853
25°	1818	1838	1857
30°	1802	1833	1863
35°	1785	1828	1870
40°	1765	1826	1894
45°	1736	1826	1937
50°	1697	1837	1995
55°	1654	1867	2084
60°	1584	1903	2199
65°	1483	1970	2334
70°	1349	2061	2511
75°	1143	2175	2623
80°	902	2189	2122
85°	665	1664	1865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.7	3.0
10°-20°	373.2	8.6
20°-30°	570.8	13.1
30°-40°	697.7	16.0
40°-50°	743.6	17.1
50°-60°	711.0	16.4
60°-70°	602.3	13.9
70°-80°	404.8	9.3
80°-90°	114.2	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°	1073.7	24.7
0°-40°	1771.4	40.7
0°-60°	3226.1	74.2
0°-90°	4347.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4347.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1367	1365	1358	1365	1365	130
15°	1320	1320	1318	1328	1326	372
25°	1225	1229	1238	1248	1251	565
35°	1087	1095	1113	1134	1139	681
45°	912	927	960	1001	1018	704
55°	705	731	796	858	888	628
65°	466	513	619	701	733	462
75°	220	300	418	490	505	235
85°	43	88	108	116	121	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1367.1	1367.1	1367.1	1367.1	1367.1
2.5°	1369.3	1369.3	1362.8	1367.1	1367.1
5°	1367.1	1365.0	1358.5	1365.0	1365.0
7.5°	1360.7	1358.5	1354.2	1360.7	1358.5
10°	1347.7	1347.7	1343.4	1349.9	1349.9
12.5°	1336.9	1334.8	1332.6	1341.3	1339.1
15°	1319.7	1319.7	1317.5	1328.3	1326.2
17.5°	1298.1	1300.3	1302.4	1311.1	1313.2
20°	1274.4	1278.7	1280.9	1293.8	1293.8
22.5°	1252.8	1255.0	1259.3	1272.3	1272.3
25°	1224.8	1229.1	1237.8	1248.5	1250.7
27.5°	1196.8	1198.9	1209.7	1224.8	1227.0
30°	1160.1	1166.6	1179.5	1196.8	1198.9
32.5°	1127.8	1134.2	1149.3	1166.6	1170.9
35°	1086.8	1095.4	1112.7	1134.2	1138.6
37.5°	1050.1	1056.6	1078.2	1101.9	1108.4
40°	1004.9	1017.8	1039.4	1067.4	1078.2
42.5°	959.6	972.5	998.4	1035.1	1048.0
45°	912.1	927.2	959.6	1000.6	1017.8
47.5°	864.7	882.0	918.6	966.0	985.5
50°	810.8	832.4	877.6	931.5	953.1
52.5°	759.0	784.9	834.5	894.9	922.9
55°	705.1	731.0	795.7	858.2	888.4
57.5°	644.8	679.3	750.4	821.6	853.9
60°	588.7	621.0	707.3	784.9	817.3
62.5°	528.3	571.4	664.2	746.1	778.4
65°	465.8	513.2	618.9	700.8	733.2
67.5°	409.7	461.5	573.6	655.5	687.9
70°	342.9	407.6	524.0	605.9	638.3
72.5°	280.3	351.5	472.2	552.0	582.2
75°	219.9	299.7	418.3	489.5	504.6
77.5°	163.9	248.0	362.3	392.5	381.7
80°	116.4	198.4	282.5	267.4	273.9
82.5°	75.5	150.9	174.7	198.4	204.9
85°	43.1	88.4	107.8	116.4	120.8
87.5°	19.4	32.3	43.1	43.1	41.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)