

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: P391678

Luminaire Tested: **24CZ2-75VHE-RDP-UNV-L930-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: P391678
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-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4199.0 lumens
Efficiency: N/A
Efficacy: 84.1 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

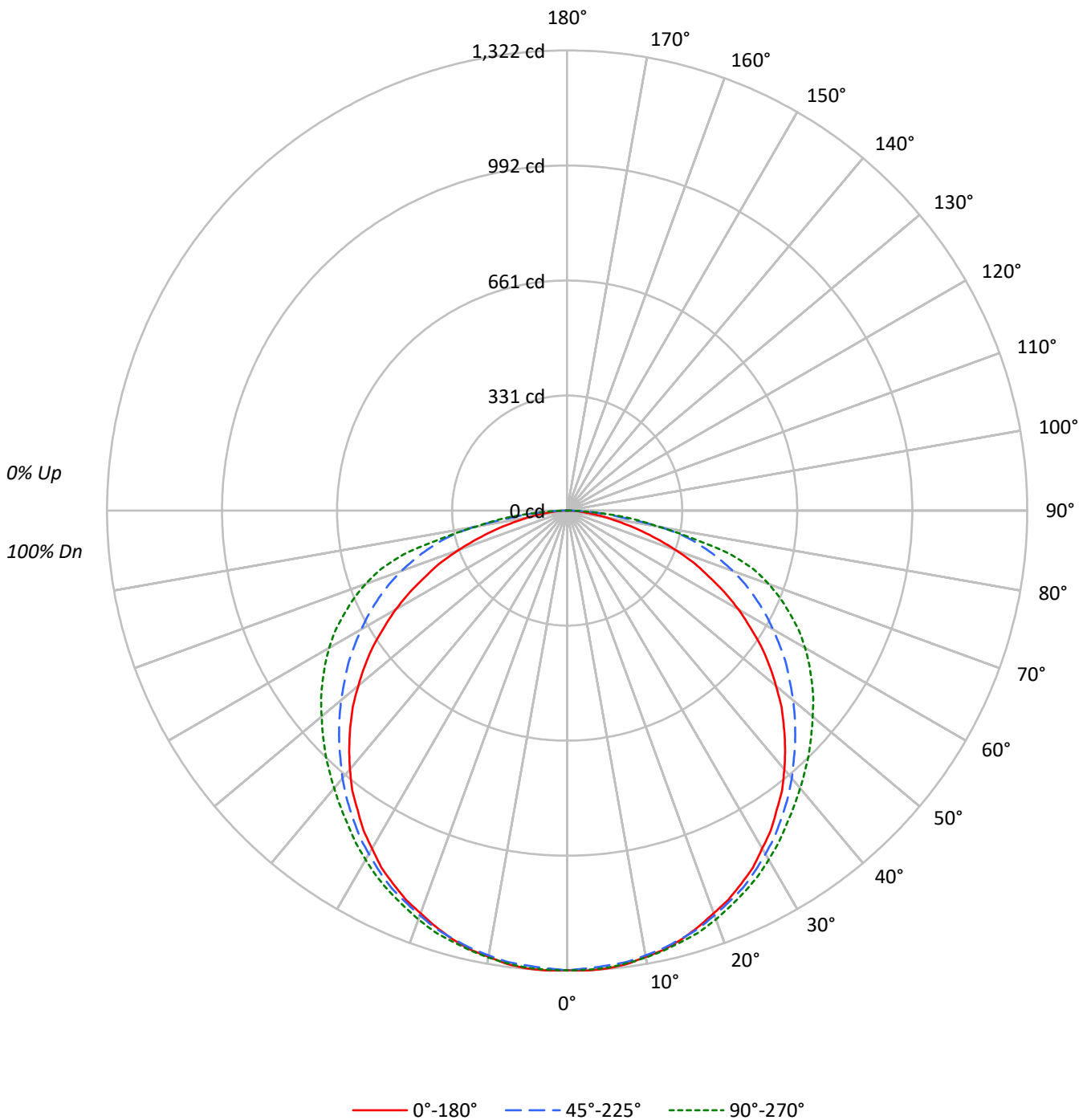
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391678

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391678

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L930-CD1-SWPD1-U

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°	1777	1777	1777
5°	1784	1772	1781
10°	1778	1773	1781
15°	1775	1773	1784
20°	1762	1771	1789
25°	1756	1775	1793
30°	1741	1770	1799
35°	1724	1765	1806
40°	1705	1763	1829
45°	1676	1764	1871
50°	1639	1774	1927
55°	1598	1803	2013
60°	1530	1838	2124
65°	1432	1903	2254
70°	1303	1991	2425
75°	1104	2101	2534
80°	872	2114	2049
85°	644	1607	1800



TEST NUMBER: P391678

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.3	3.0
10°-20°	360.5	8.6
20°-30°	551.3	13.1
30°-40°	673.9	16.0
40°-50°	718.3	17.1
50°-60°	686.7	16.4
60°-70°	581.8	13.9
70°-80°	391.0	9.3
80°-90°	110.3	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°	1037.0	24.7
0°-40°	1710.9	40.7
0°-60°	3115.9	74.2
0°-90°	4199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4199.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1320	1318	1312	1318	1318	125
15°	1275	1275	1273	1283	1281	359
25°	1183	1187	1196	1206	1208	545
35°	1050	1058	1075	1096	1100	658
45°	881	896	927	966	983	680
55°	681	706	768	829	858	607
65°	450	496	598	677	708	447
75°	212	290	404	473	487	227
85°	42	85	104	112	117	52
90°	0	0	0	0	0	



TEST NUMBER: P391678

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1320.5	1320.5	1320.5	1320.5	1320.5
2.5°	1322.5	1322.5	1316.3	1320.5	1320.5
5°	1320.5	1318.4	1312.1	1318.4	1318.4
7.5°	1314.2	1312.1	1308.0	1314.2	1312.1
10°	1301.7	1301.7	1297.6	1303.8	1303.8
12.5°	1291.3	1289.2	1287.1	1295.5	1293.4
15°	1274.6	1274.6	1272.6	1283.0	1280.9
17.5°	1253.8	1255.9	1258.0	1266.3	1268.4
20°	1230.9	1235.1	1237.2	1249.7	1249.7
22.5°	1210.1	1212.2	1216.3	1228.8	1228.8
25°	1183.0	1187.2	1195.5	1205.9	1208.0
27.5°	1155.9	1158.0	1168.4	1183.0	1185.1
30°	1120.5	1126.8	1139.3	1155.9	1158.0
32.5°	1089.3	1095.5	1110.1	1126.8	1130.9
35°	1049.7	1058.0	1074.7	1095.5	1099.7
37.5°	1014.3	1020.5	1041.4	1064.3	1070.5
40°	970.6	983.1	1003.9	1031.0	1041.4
42.5°	926.8	939.3	964.3	999.7	1012.2
45°	881.0	895.6	926.8	966.4	983.1
47.5°	835.2	851.8	887.3	933.1	951.8
50°	783.1	803.9	847.7	899.7	920.6
52.5°	733.1	758.1	806.0	864.3	891.4
55°	681.1	706.1	768.5	828.9	858.1
57.5°	622.7	656.1	724.8	793.5	824.8
60°	568.6	599.8	683.1	758.1	789.4
62.5°	510.3	551.9	641.5	720.6	751.9
65°	449.9	495.7	597.8	676.9	708.1
67.5°	395.7	445.7	554.0	633.2	664.4
70°	331.2	393.6	506.1	585.3	616.5
72.5°	270.8	339.5	456.1	533.2	562.3
75°	212.4	289.5	404.1	472.8	487.4
77.5°	158.3	239.5	349.9	379.1	368.6
80°	112.5	191.6	272.8	258.3	264.5
82.5°	72.9	145.8	168.7	191.6	197.9
85°	41.7	85.4	104.1	112.5	116.6
87.5°	18.7	31.2	41.7	41.7	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)