

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: P391682

Luminaire Tested: **24CZ2-75VHE-RDP-UNV-L935-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: P391682
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-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4356.9 lumens
Efficiency: N/A
Efficacy: 87.3 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

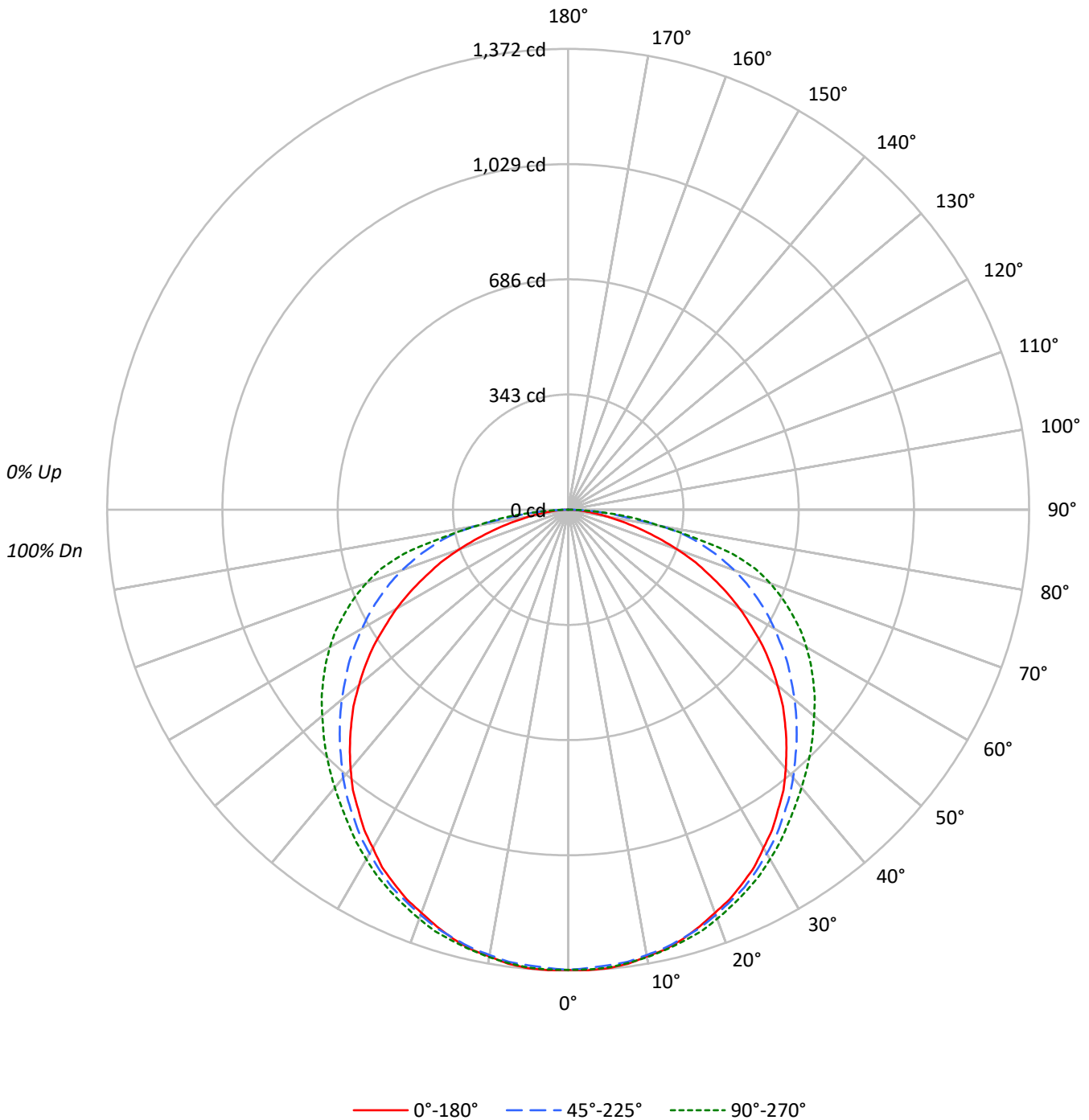
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391682

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391682

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L935-CD1-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°	1843	1843	1843
5°	1850	1839	1848
10°	1845	1839	1848
15°	1842	1839	1851
20°	1829	1838	1857
25°	1822	1842	1861
30°	1806	1837	1867
35°	1789	1832	1874
40°	1769	1829	1898
45°	1739	1830	1941
50°	1701	1841	1999
55°	1658	1871	2089
60°	1588	1907	2204
65°	1486	1975	2339
70°	1352	2066	2517
75°	1146	2179	2629
80°	904	2194	2127
85°	667	1669	1868



TEST NUMBER: P391682

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.0
10°-20°	374.0	8.6
20°-30°	572.0	13.1
30°-40°	699.3	16.0
40°-50°	745.3	17.1
50°-60°	712.6	16.4
60°-70°	603.6	13.9
70°-80°	405.7	9.3
80°-90°	114.4	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°	1076.0	24.7
0°-40°	1775.3	40.7
0°-60°	3233.1	74.2
0°-90°	4356.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4356.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1370	1368	1362	1368	1368	130
15°	1323	1323	1320	1331	1329	373
25°	1228	1232	1240	1251	1253	566
35°	1089	1098	1115	1137	1141	682
45°	914	929	962	1003	1020	705
55°	707	733	797	860	890	629
65°	467	514	620	702	735	463
75°	220	300	419	491	506	236
85°	43	89	108	117	121	53
90°	0	0	0	0	0	



TEST NUMBER: P391682

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.1	1370.1	1370.1	1370.1	1370.1
2.5°	1372.3	1372.3	1365.8	1370.1	1370.1
5°	1370.1	1368.0	1361.5	1368.0	1368.0
7.5°	1363.6	1361.5	1357.2	1363.6	1361.5
10°	1350.7	1350.7	1346.3	1352.8	1352.8
12.5°	1339.9	1337.7	1335.5	1344.2	1342.0
15°	1322.6	1322.6	1320.4	1331.2	1329.1
17.5°	1301.0	1303.1	1305.3	1313.9	1316.1
20°	1277.2	1281.5	1283.7	1296.6	1296.6
22.5°	1255.6	1257.7	1262.1	1275.0	1275.0
25°	1227.5	1231.8	1240.5	1251.3	1253.4
27.5°	1199.4	1201.6	1212.4	1227.5	1229.7
30°	1162.7	1169.1	1182.1	1199.4	1201.6
32.5°	1130.2	1136.7	1151.9	1169.1	1173.5
35°	1089.2	1097.8	1115.1	1136.7	1141.0
37.5°	1052.4	1058.9	1080.5	1104.3	1110.8
40°	1007.1	1020.0	1041.6	1069.7	1080.5
42.5°	961.7	974.6	1000.6	1037.3	1050.3
45°	914.1	929.3	961.7	1002.7	1020.0
47.5°	866.6	883.9	920.6	968.2	987.6
50°	812.6	834.2	879.6	933.6	955.2
52.5°	760.7	786.6	836.3	896.8	924.9
55°	706.7	732.6	797.4	860.1	890.4
57.5°	646.2	680.7	752.1	823.4	855.8
60°	590.0	622.4	708.8	786.6	819.0
62.5°	529.5	572.7	665.6	747.7	780.1
65°	466.8	514.3	620.2	702.3	734.8
67.5°	410.6	462.5	574.8	657.0	689.4
70°	343.6	408.4	525.1	607.3	639.7
72.5°	280.9	352.3	473.3	553.2	583.5
75°	220.4	300.4	419.2	490.6	505.7
77.5°	164.2	248.5	363.1	393.3	382.5
80°	116.7	198.8	283.1	268.0	274.5
82.5°	75.6	151.3	175.0	198.8	205.3
85°	43.2	88.6	108.1	116.7	121.0
87.5°	19.4	32.4	43.2	43.2	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)