

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: P391686

Luminaire Tested: **24CZ2-75VHE-RDP-UNV-L950-CD1-SDWPD1-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: P391686
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-SDWPD1-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: 4558.8 lumens
Efficiency: N/A
Efficacy: 91.4 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

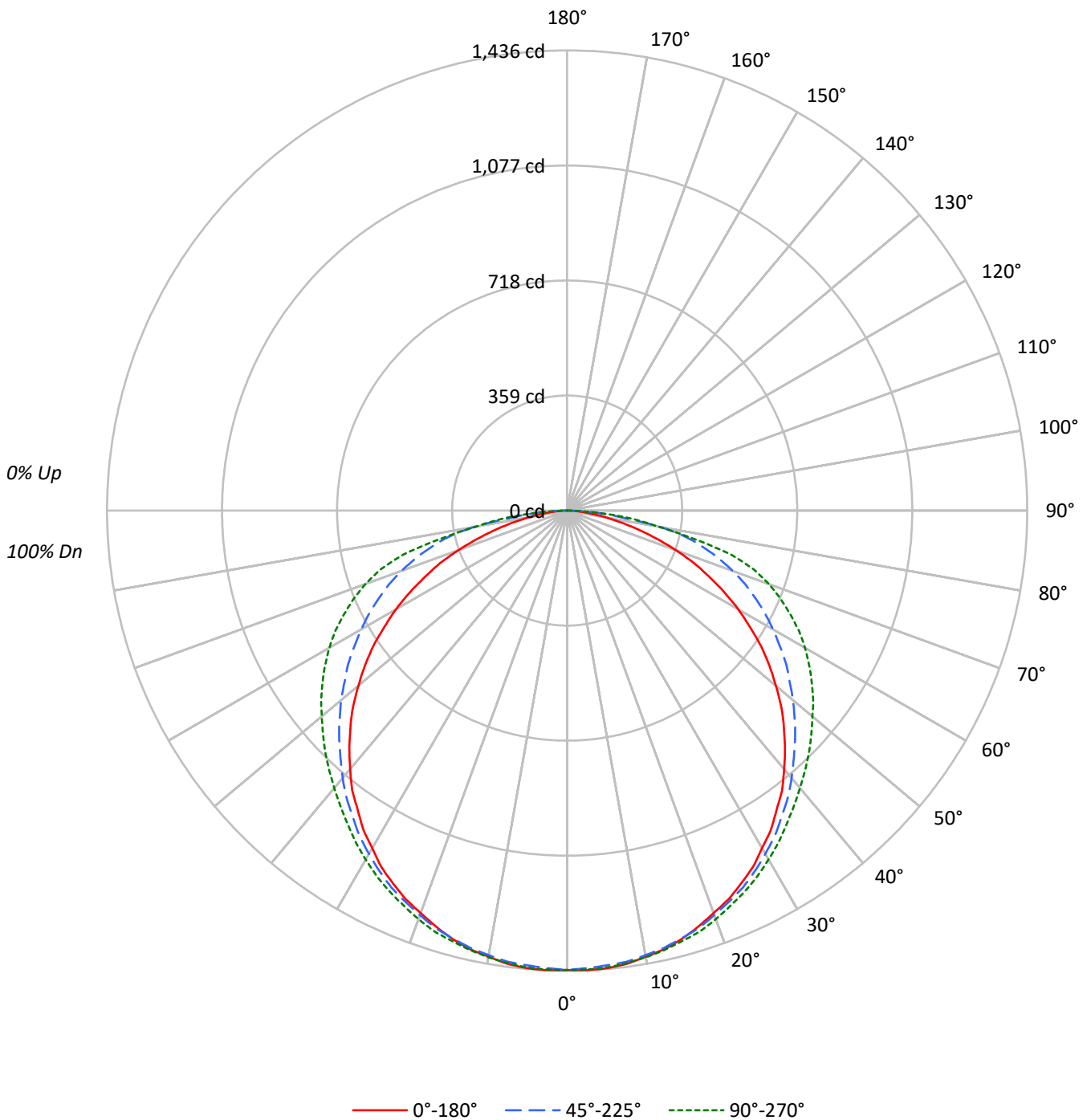
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1929	1929	1929
5°	1936	1924	1933
10°	1931	1925	1934
15°	1928	1925	1937
20°	1914	1923	1943
25°	1907	1927	1947
30°	1890	1922	1953
35°	1872	1917	1961
40°	1851	1914	1986
45°	1820	1915	2031
50°	1780	1926	2092
55°	1734	1957	2185
60°	1661	1996	2306
65°	1555	2066	2448
70°	1414	2162	2633
75°	1199	2281	2751
80°	946	2295	2225
85°	698	1746	1954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	3.0
10°-20°	391.4	8.6
20°-30°	598.5	13.1
30°-40°	731.7	16.0
40°-50°	779.8	17.1
50°-60°	745.6	16.4
60°-70°	631.6	13.9
70°-80°	424.5	9.3
80°-90°	119.7	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°	1125.9	24.7
0°-40°	1857.5	40.7
0°-60°	3382.9	74.2
0°-90°	4558.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4558.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1434	1431	1425	1431	1431	136
15°	1384	1384	1382	1393	1391	390
25°	1284	1289	1298	1309	1312	592
35°	1140	1149	1167	1189	1194	714
45°	956	972	1006	1049	1067	738
55°	739	767	834	900	932	659
65°	488	538	649	735	769	485
75°	231	314	439	513	529	247
85°	45	93	113	122	127	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.6	1433.6	1433.6	1433.6	1433.6
2.5°	1435.9	1435.9	1429.1	1433.6	1433.6
5°	1433.6	1431.4	1424.6	1431.4	1431.4
7.5°	1426.8	1424.6	1420.0	1426.8	1424.6
10°	1413.3	1413.3	1408.7	1415.5	1415.5
12.5°	1402.0	1399.7	1397.4	1406.5	1404.2
15°	1383.9	1383.9	1381.6	1392.9	1390.6
17.5°	1361.3	1363.5	1365.8	1374.8	1377.1
20°	1336.4	1340.9	1343.2	1356.7	1356.7
22.5°	1313.8	1316.0	1320.6	1334.1	1334.1
25°	1284.4	1288.9	1297.9	1309.2	1311.5
27.5°	1255.0	1257.2	1268.5	1284.4	1286.6
30°	1216.5	1223.3	1236.9	1255.0	1257.2
32.5°	1182.6	1189.4	1205.2	1223.3	1227.8
35°	1139.7	1148.7	1166.8	1189.4	1193.9
37.5°	1101.2	1108.0	1130.6	1155.5	1162.3
40°	1053.7	1067.3	1089.9	1119.3	1130.6
42.5°	1006.2	1019.8	1046.9	1085.4	1099.0
45°	956.5	972.3	1006.2	1049.2	1067.3
47.5°	906.7	924.8	963.3	1013.0	1033.4
50°	850.2	872.8	920.3	976.8	999.5
52.5°	795.9	823.1	875.1	938.4	967.8
55°	739.4	766.6	834.4	900.0	931.6
57.5°	676.1	712.3	786.9	861.5	895.4
60°	617.3	651.2	741.7	823.1	857.0
62.5°	554.0	599.2	696.5	782.4	816.3
65°	488.4	538.2	649.0	734.9	768.8
67.5°	429.6	483.9	601.5	687.4	721.3
70°	359.5	427.4	549.5	635.4	669.3
72.5°	294.0	368.6	495.2	578.9	610.5
75°	230.6	314.3	438.7	513.3	529.1
77.5°	171.9	260.0	379.9	411.5	400.2
80°	122.1	208.0	296.2	280.4	287.2
82.5°	79.1	158.3	183.2	208.0	214.8
85°	45.2	92.7	113.1	122.1	126.6
87.5°	20.4	33.9	45.2	45.2	43.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)