

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: P391725

Luminaire Tested: **24CZ2-80VHE-RDP-UNV-L930-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: P391725
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: 24CZ2-80VHE-RDP-UNV-L930-CD1-SDWPD1-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: 4400.7 lumens
Efficiency: N/A
Efficacy: 81.8 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

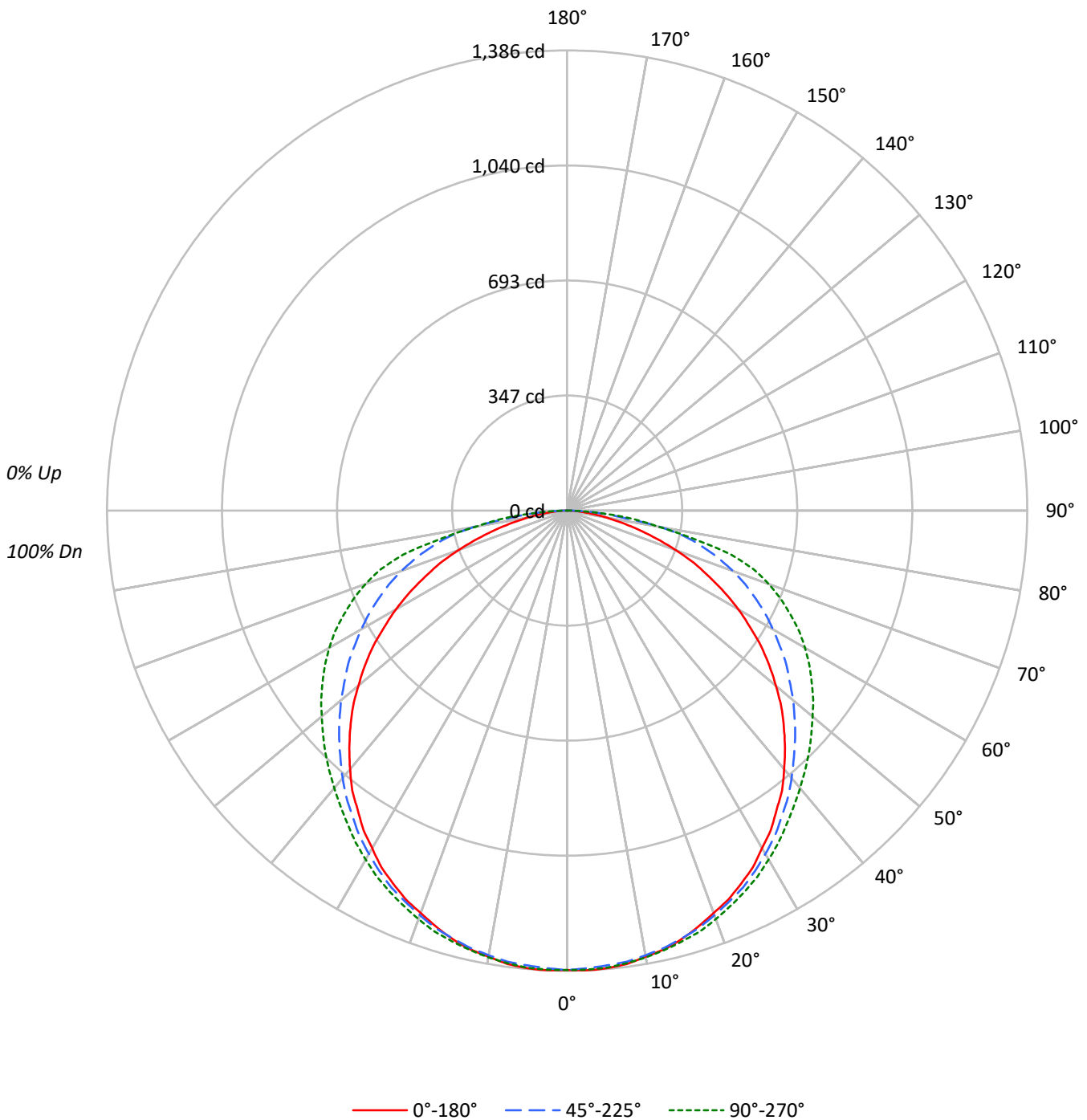
Input Watts (W): 53.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1862	1862	1862
5°	1869	1857	1866
10°	1864	1858	1867
15°	1861	1858	1870
20°	1847	1857	1875
25°	1841	1860	1879
30°	1824	1855	1885
35°	1807	1850	1893
40°	1787	1848	1917
45°	1757	1848	1960
50°	1718	1860	2020
55°	1674	1890	2110
60°	1604	1927	2226
65°	1501	1995	2363
70°	1365	2087	2542
75°	1157	2202	2655
80°	914	2215	2148
85°	675	1684	1886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	3.0
10°-20°	377.8	8.6
20°-30°	577.8	13.1
30°-40°	706.3	16.0
40°-50°	752.8	17.1
50°-60°	719.7	16.4
60°-70°	609.7	13.9
70°-80°	409.8	9.3
80°-90°	115.6	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°	1086.8	24.7
0°-40°	1793.1	40.7
0°-60°	3265.6	74.2
0°-90°	4400.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4400.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1384	1384	1384	1384	1384	
5°	1384	1382	1375	1382	1382	131
15°	1336	1336	1334	1345	1342	377
25°	1240	1244	1253	1264	1266	571
35°	1100	1109	1126	1148	1152	689
45°	923	939	971	1013	1030	712
55°	714	740	806	869	899	636
65°	472	520	626	709	742	468
75°	223	303	424	496	511	238
85°	44	90	109	118	122	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1383.9	1383.9	1383.9	1383.9	1383.9
2.5°	1386.1	1386.1	1379.5	1383.9	1383.9
5°	1383.9	1381.7	1375.2	1381.7	1381.7
7.5°	1377.3	1375.2	1370.8	1377.3	1375.2
10°	1364.2	1364.2	1359.9	1366.4	1366.4
12.5°	1353.3	1351.2	1349.0	1357.7	1355.5
15°	1335.9	1335.9	1333.7	1344.6	1342.4
17.5°	1314.0	1316.2	1318.4	1327.1	1329.3
20°	1290.0	1294.4	1296.6	1309.7	1309.7
22.5°	1268.2	1270.4	1274.8	1287.9	1287.9
25°	1239.8	1244.2	1252.9	1263.8	1266.0
27.5°	1211.5	1213.6	1224.6	1239.8	1242.0
30°	1174.3	1180.9	1194.0	1211.5	1213.6
32.5°	1141.6	1148.2	1163.4	1180.9	1185.3
35°	1100.1	1108.9	1126.3	1148.2	1152.5
37.5°	1063.0	1069.6	1091.4	1115.4	1122.0
40°	1017.2	1030.3	1052.1	1080.5	1091.4
42.5°	971.3	984.4	1010.6	1047.7	1060.8
45°	923.3	938.6	971.3	1012.8	1030.3
47.5°	875.3	892.8	929.9	977.9	997.5
50°	820.7	842.6	888.4	943.0	964.8
52.5°	768.3	794.5	844.7	905.9	934.2
55°	713.8	740.0	805.5	868.8	899.3
57.5°	652.7	687.6	759.6	831.6	864.4
60°	595.9	628.6	716.0	794.5	827.3
62.5°	534.8	578.4	672.3	755.2	788.0
65°	471.5	519.5	626.5	709.4	742.2
67.5°	414.7	467.1	580.6	663.6	696.3
70°	347.1	412.5	530.4	613.4	646.1
72.5°	283.8	355.8	478.0	558.8	589.4
75°	222.6	303.4	423.5	495.5	510.8
77.5°	165.9	251.0	366.7	397.3	386.4
80°	117.9	200.8	285.9	270.7	277.2
82.5°	76.4	152.8	176.8	200.8	207.4
85°	43.7	89.5	109.1	117.9	122.2
87.5°	19.6	32.7	43.7	43.7	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)