

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: P276774

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276774
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4710.0 lumens
Efficiency: N/A
Efficacy: 85.8 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

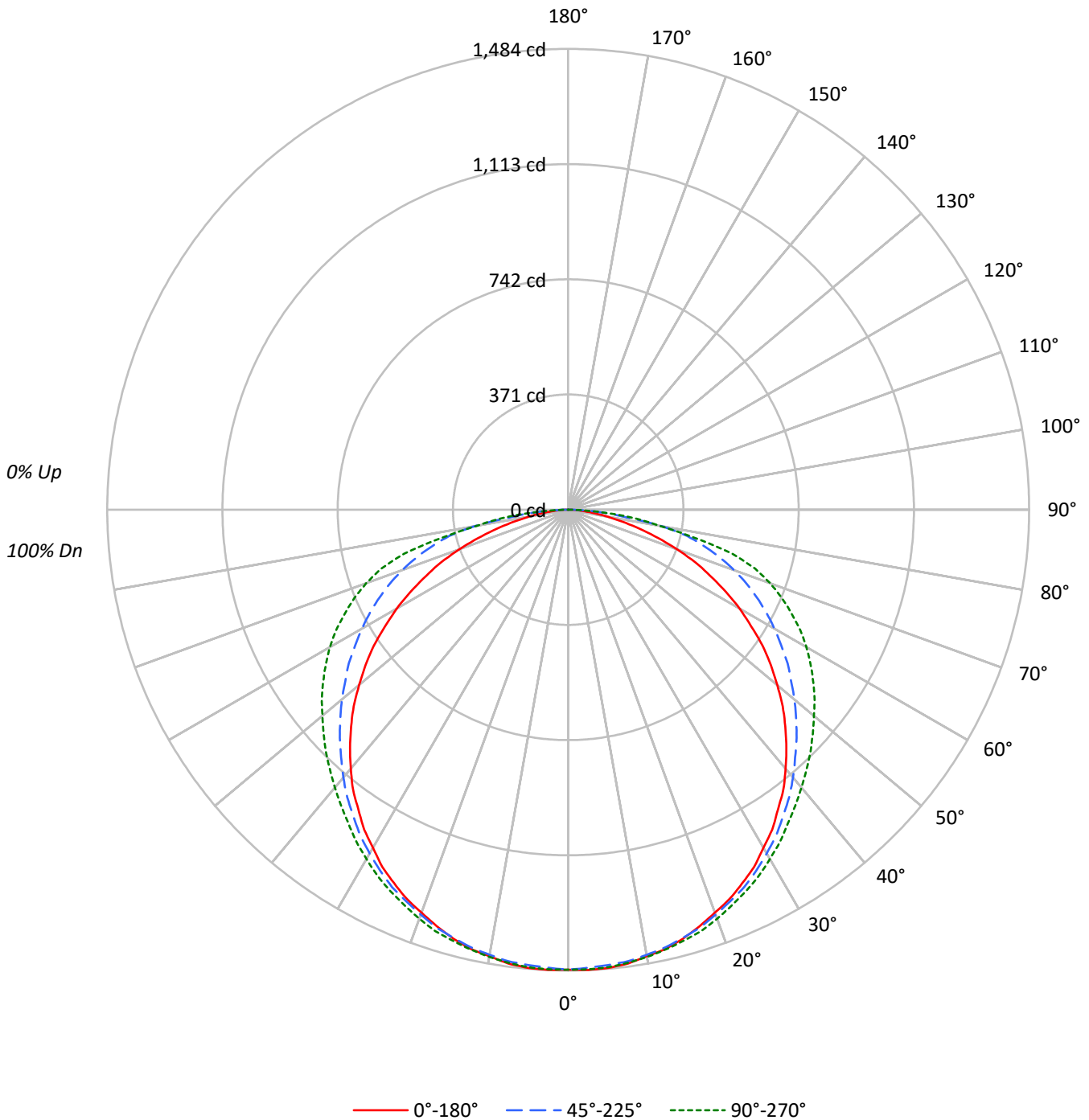
Input Watts (W): 54.895203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276774

CATALOG NUMBER: 24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P276774

CATALOG NUMBER: 24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4000K

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°	1993	1993	1993
5°	2001	1988	1997
10°	1995	1989	1998
15°	1992	1988	2001
20°	1977	1987	2007
25°	1970	1991	2012
30°	1953	1985	2018
35°	1934	1980	2026
40°	1912	1978	2052
45°	1880	1978	2098
50°	1839	1990	2161
55°	1792	2022	2258
60°	1716	2062	2383
65°	1606	2135	2529
70°	1461	2233	2720
75°	1239	2356	2842
80°	978	2371	2299
85°	721	1803	2019



TEST NUMBER: P276774

CATALOG NUMBER: 24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	3.0
10°-20°	404.4	8.6
20°-30°	618.4	13.1
30°-40°	755.9	16.0
40°-50°	805.7	17.1
50°-60°	770.3	16.4
60°-70°	652.6	13.9
70°-80°	438.6	9.3
80°-90°	123.7	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°	1163.2	24.7
0°-40°	1919.1	40.7
0°-60°	3495.1	74.2
0°-90°	4710.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4710.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1481	1481	1481	1481	1481	
5°	1481	1479	1472	1479	1479	141
15°	1430	1430	1427	1439	1437	403
25°	1327	1332	1341	1353	1355	612
35°	1178	1187	1206	1229	1234	738
45°	988	1005	1040	1084	1103	762
55°	764	792	862	930	962	680
65°	505	556	670	759	794	501
75°	238	325	453	530	547	255
85°	47	96	117	126	131	58
90°	0	0	0	0	0	



TEST NUMBER: P276774

CATALOG NUMBER: 24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1481.2	1481.2	1481.2	1481.2	1481.2
2.5°	1483.5	1483.5	1476.5	1481.2	1481.2
5°	1481.2	1478.8	1471.8	1478.8	1478.8
7.5°	1474.2	1471.8	1467.1	1474.2	1471.8
10°	1460.1	1460.1	1455.5	1462.5	1462.5
12.5°	1448.5	1446.1	1443.8	1453.1	1450.8
15°	1429.8	1429.8	1427.4	1439.1	1436.8
17.5°	1406.4	1408.7	1411.1	1420.4	1422.8
20°	1380.7	1385.4	1387.7	1401.7	1401.7
22.5°	1357.3	1359.7	1364.3	1378.4	1378.4
25°	1327.0	1331.6	1341.0	1352.7	1355.0
27.5°	1296.6	1298.9	1310.6	1327.0	1329.3
30°	1256.9	1263.9	1277.9	1296.6	1298.9
32.5°	1221.8	1228.8	1245.2	1263.9	1268.6
35°	1177.5	1186.8	1205.5	1228.8	1233.5
37.5°	1137.7	1144.7	1168.1	1193.8	1200.8
40°	1088.7	1102.7	1126.1	1156.4	1168.1
42.5°	1039.6	1053.6	1081.7	1121.4	1135.4
45°	988.2	1004.6	1039.6	1084.0	1102.7
47.5°	936.8	955.5	995.2	1046.6	1067.7
50°	878.4	901.8	950.8	1009.2	1032.6
52.5°	822.3	850.4	904.1	969.5	999.9
55°	763.9	792.0	862.1	929.8	962.5
57.5°	698.5	735.9	813.0	890.1	925.1
60°	637.8	672.8	766.3	850.4	885.4
62.5°	572.4	619.1	719.6	808.3	843.4
65°	504.6	556.0	670.5	759.3	794.3
67.5°	443.9	500.0	621.4	710.2	745.3
70°	371.5	441.5	567.7	656.5	691.5
72.5°	303.7	380.8	511.6	598.1	630.8
75°	238.3	324.7	453.2	530.3	546.7
77.5°	177.6	268.7	392.5	425.2	413.5
80°	126.2	214.9	306.0	289.7	296.7
82.5°	81.8	163.5	189.2	214.9	221.9
85°	46.7	95.8	116.8	126.2	130.8
87.5°	21.0	35.0	46.7	46.7	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)