

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: P276848

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276848
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-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3813.2 lumens
Efficiency: N/A
Efficacy: 69.7 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

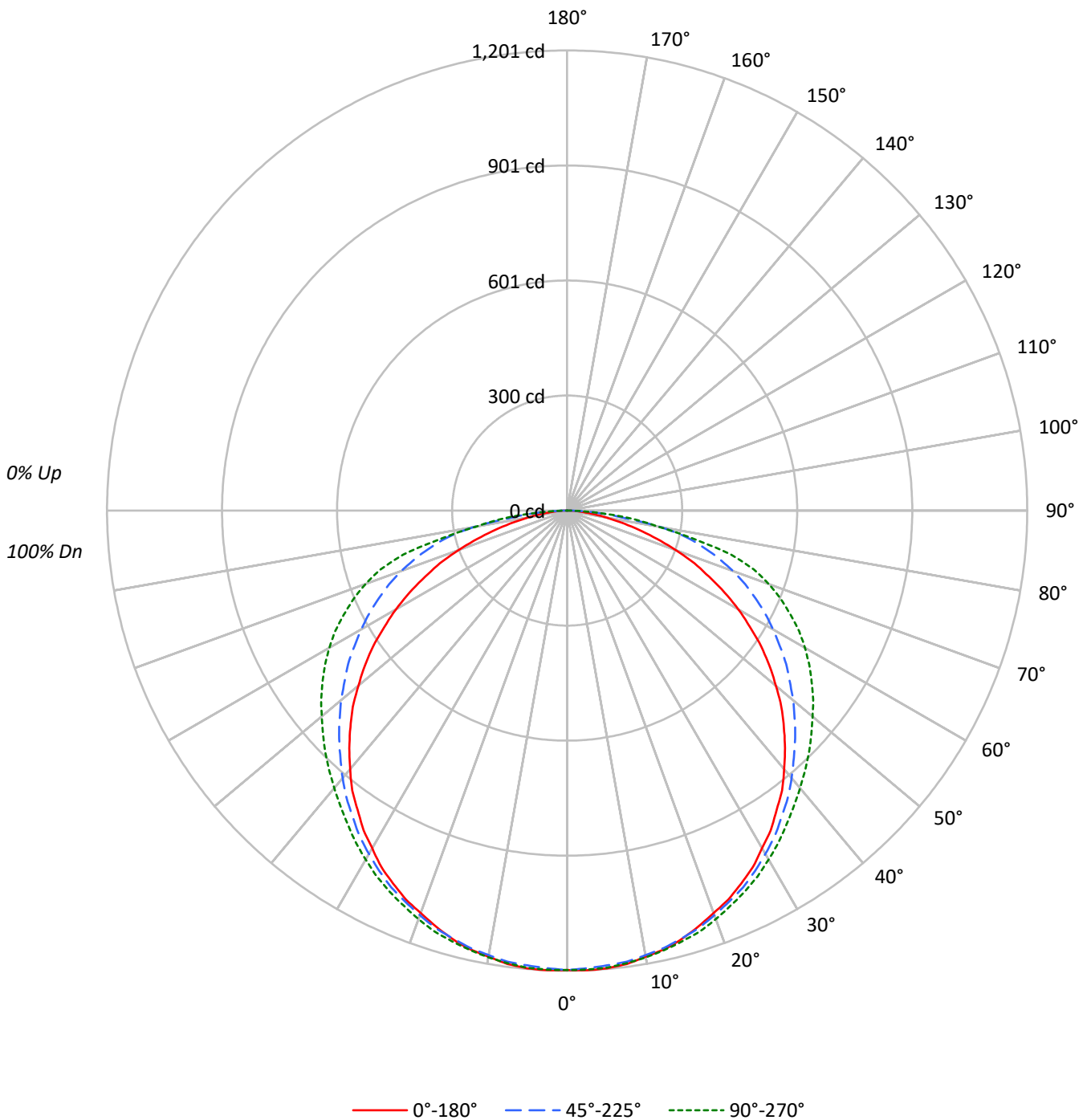
Input Watts (W): 54.680559
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1614	1614	1614
5°	1620	1609	1617
10°	1615	1610	1618
15°	1612	1610	1620
20°	1601	1609	1625
25°	1595	1612	1629
30°	1581	1607	1634
35°	1566	1603	1640
40°	1548	1601	1661
45°	1522	1602	1699
50°	1489	1611	1750
55°	1451	1637	1828
60°	1390	1669	1929
65°	1301	1728	2047
70°	1183	1808	2203
75°	1003	1907	2301
80°	791	1920	1861
85°	584	1460	1635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.8	3.0
10°-20°	327.4	8.6
20°-30°	500.6	13.1
30°-40°	612.0	16.0
40°-50°	652.3	17.1
50°-60°	623.7	16.4
60°-70°	528.3	13.9
70°-80°	355.1	9.3
80°-90°	100.1	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°	941.7	24.7
0°-40°	1553.8	40.7
0°-60°	2829.7	74.2
0°-90°	3813.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3813.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1199	1197	1192	1197	1197	114
15°	1158	1158	1156	1165	1163	326
25°	1074	1078	1086	1095	1097	495
35°	953	961	976	995	999	597
45°	800	813	842	878	893	617
55°	618	641	698	753	779	551
65°	408	450	543	615	643	406
75°	193	263	367	429	443	207
85°	38	78	95	102	106	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1199.2	1199.2	1199.2	1199.2	1199.2
2.5°	1201.0	1201.0	1195.4	1199.2	1199.2
5°	1199.2	1197.3	1191.6	1197.3	1197.3
7.5°	1193.5	1191.6	1187.8	1193.5	1191.6
10°	1182.1	1182.1	1178.3	1184.0	1184.0
12.5°	1172.7	1170.8	1168.9	1176.5	1174.6
15°	1157.5	1157.5	1155.7	1165.1	1163.2
17.5°	1138.6	1140.5	1142.4	1150.0	1151.9
20°	1117.8	1121.6	1123.5	1134.8	1134.8
22.5°	1098.9	1100.8	1104.6	1115.9	1115.9
25°	1074.3	1078.1	1085.7	1095.1	1097.0
27.5°	1049.7	1051.6	1061.1	1074.3	1076.2
30°	1017.6	1023.3	1034.6	1049.7	1051.6
32.5°	989.2	994.9	1008.1	1023.3	1027.0
35°	953.3	960.8	976.0	994.9	998.7
37.5°	921.1	926.8	945.7	966.5	972.2
40°	881.4	892.7	911.7	936.2	945.7
42.5°	841.7	853.0	875.7	907.9	919.2
45°	800.1	813.3	841.7	877.6	892.7
47.5°	758.5	773.6	805.7	847.4	864.4
50°	711.2	730.1	769.8	817.1	836.0
52.5°	665.8	688.5	732.0	784.9	809.5
55°	618.5	641.2	697.9	752.8	779.3
57.5°	565.5	595.8	658.2	720.6	749.0
60°	516.4	544.7	620.4	688.5	716.8
62.5°	463.4	501.2	582.6	654.4	682.8
65°	408.5	450.2	542.8	614.7	643.1
67.5°	359.4	404.8	503.1	575.0	603.4
70°	300.7	357.5	459.6	531.5	559.9
72.5°	245.9	308.3	414.2	484.2	510.7
75°	192.9	262.9	366.9	429.4	442.6
77.5°	143.7	217.5	317.8	344.2	334.8
80°	102.1	174.0	247.8	234.5	240.2
82.5°	66.2	132.4	153.2	174.0	179.7
85°	37.8	77.5	94.6	102.1	105.9
87.5°	17.0	28.4	37.8	37.8	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)