

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: P277090

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277090
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-L92765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3655.2 lumens
Efficiency: N/A
Efficacy: 68.7 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

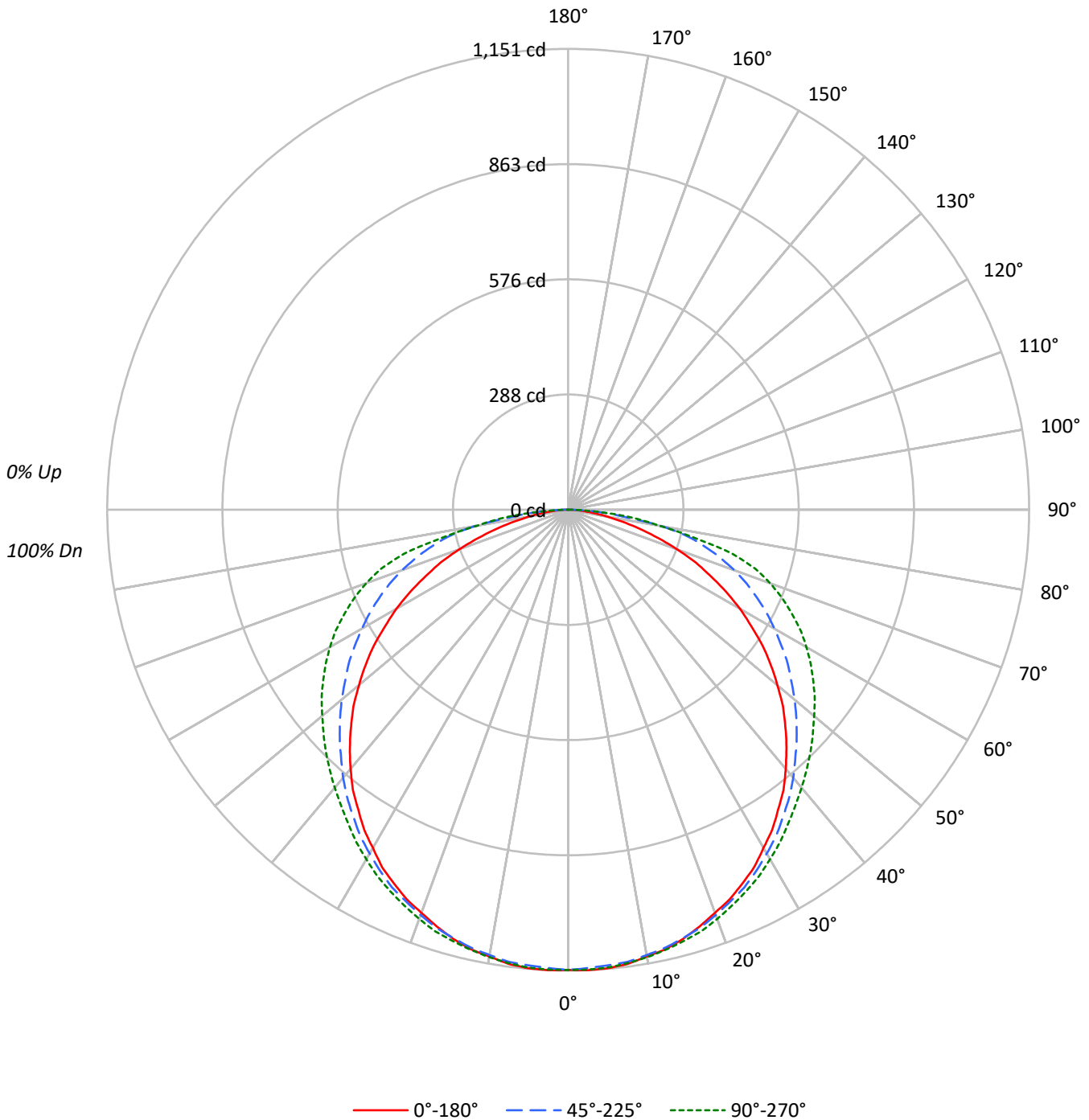
Input Watts (W): 53.196
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1547	1547	1547
5°	1553	1543	1550
10°	1548	1543	1551
15°	1546	1543	1553
20°	1534	1542	1558
25°	1529	1545	1561
30°	1515	1541	1566
35°	1501	1537	1572
40°	1484	1535	1592
45°	1459	1535	1628
50°	1427	1545	1677
55°	1391	1569	1752
60°	1332	1600	1849
65°	1247	1656	1962
70°	1134	1733	2111
75°	961	1828	2206
80°	759	1840	1784
85°	560	1400	1567



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	3.0
10°-20°	313.8	8.6
20°-30°	479.9	13.1
30°-40°	586.7	16.0
40°-50°	625.2	17.1
50°-60°	597.8	16.4
60°-70°	506.4	13.9
70°-80°	340.4	9.3
80°-90°	96.0	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°	902.7	24.7
0°-40°	1489.4	40.7
0°-60°	2712.4	74.2
0°-90°	3655.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3655.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1150	1148	1142	1148	1148	109
15°	1110	1110	1108	1117	1115	313
25°	1030	1033	1041	1050	1052	475
35°	914	921	936	954	957	572
45°	767	780	807	841	856	592
55°	593	615	669	722	747	528
65°	392	432	520	589	616	389
75°	185	252	352	412	424	198
85°	36	74	91	98	102	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1149.5	1149.5	1149.5	1149.5	1149.5
2.5°	1151.3	1151.3	1145.8	1149.5	1149.5
5°	1149.5	1147.7	1142.2	1147.7	1147.7
7.5°	1144.0	1142.2	1138.6	1144.0	1142.2
10°	1133.1	1133.1	1129.5	1135.0	1135.0
12.5°	1124.1	1122.3	1120.5	1127.7	1125.9
15°	1109.6	1109.6	1107.8	1116.8	1115.0
17.5°	1091.4	1093.3	1095.1	1102.3	1104.1
20°	1071.5	1075.1	1076.9	1087.8	1087.8
22.5°	1053.4	1055.2	1058.8	1069.7	1069.7
25°	1029.8	1033.4	1040.7	1049.7	1051.6
27.5°	1006.2	1008.0	1017.1	1029.8	1031.6
30°	975.4	980.9	991.7	1006.2	1008.0
32.5°	948.2	953.7	966.3	980.9	984.5
35°	913.8	921.0	935.5	953.7	957.3
37.5°	882.9	888.4	906.5	926.5	931.9
40°	844.9	855.8	873.9	897.5	906.5
42.5°	806.8	817.7	839.4	870.3	881.1
45°	766.9	779.6	806.8	841.2	855.8
47.5°	727.0	741.5	772.4	812.2	828.6
50°	681.7	699.8	737.9	783.2	801.4
52.5°	638.2	659.9	701.6	752.4	776.0
55°	592.9	614.6	669.0	721.6	747.0
57.5°	542.1	571.1	630.9	690.8	718.0
60°	495.0	522.2	594.7	659.9	687.1
62.5°	444.2	480.5	558.4	627.3	654.5
65°	391.6	431.5	520.3	589.2	616.4
67.5°	344.5	388.0	482.3	551.2	578.4
70°	288.3	342.7	440.6	509.5	536.7
72.5°	235.7	295.5	397.1	464.1	489.5
75°	184.9	252.0	351.7	411.6	424.3
77.5°	137.8	208.5	304.6	330.0	320.9
80°	97.9	166.8	237.5	224.8	230.3
82.5°	63.5	126.9	146.9	166.8	172.2
85°	36.3	74.3	90.7	97.9	101.5
87.5°	16.3	27.2	36.3	36.3	34.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)