

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: P277089

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277089
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-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3515.3 lumens
Efficiency: N/A
Efficacy: 65.6 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

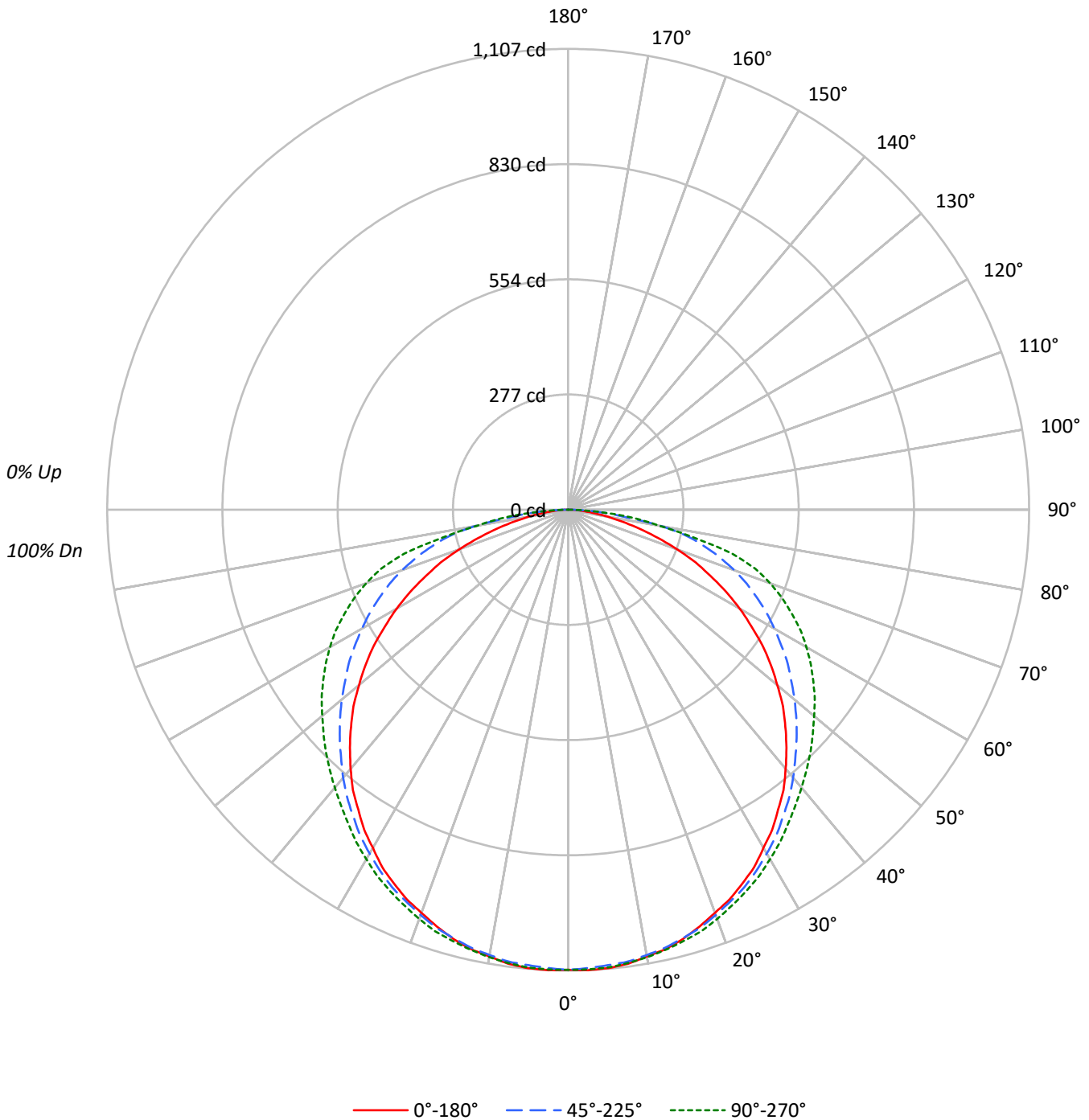
Input Watts (W): 53.568
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1487	1487	1487
5°	1493	1484	1491
10°	1489	1484	1491
15°	1486	1484	1494
20°	1476	1483	1498
25°	1470	1486	1501
30°	1457	1482	1506
35°	1443	1478	1512
40°	1427	1476	1531
45°	1403	1476	1566
50°	1372	1485	1613
55°	1338	1509	1685
60°	1281	1539	1778
65°	1199	1593	1887
70°	1090	1667	2030
75°	924	1759	2121
80°	730	1770	1715
85°	539	1346	1507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	3.0
10°-20°	301.8	8.6
20°-30°	461.5	13.1
30°-40°	564.2	16.0
40°-50°	601.3	17.1
50°-60°	574.9	16.4
60°-70°	487.0	13.9
70°-80°	327.3	9.3
80°-90°	92.3	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°	868.2	24.7
0°-40°	1432.3	40.7
0°-60°	2608.6	74.2
0°-90°	3515.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3515.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1105	1104	1098	1104	1104	105
15°	1067	1067	1065	1074	1072	301
25°	990	994	1001	1010	1011	456
35°	879	886	900	917	921	551
45°	738	750	776	809	823	569
55°	570	591	643	694	718	508
65°	377	415	500	567	593	374
75°	178	242	338	396	408	190
85°	35	72	87	94	98	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1105.4	1105.4	1105.4	1105.4	1105.4
2.5°	1107.2	1107.2	1102.0	1105.4	1105.4
5°	1105.4	1103.7	1098.5	1103.7	1103.7
7.5°	1100.2	1098.5	1095.0	1100.2	1098.5
10°	1089.8	1089.8	1086.3	1091.5	1091.5
12.5°	1081.0	1079.3	1077.5	1084.5	1082.8
15°	1067.1	1067.1	1065.3	1074.1	1072.3
17.5°	1049.7	1051.4	1053.1	1060.1	1061.9
20°	1030.5	1034.0	1035.7	1046.2	1046.2
22.5°	1013.0	1014.8	1018.3	1028.7	1028.7
25°	990.4	993.9	1000.8	1009.5	1011.3
27.5°	967.7	969.4	978.2	990.4	992.1
30°	938.1	943.3	953.8	967.7	969.4
32.5°	911.9	917.1	929.3	943.3	946.8
35°	878.8	885.8	899.7	917.1	920.6
37.5°	849.1	854.4	871.8	891.0	896.2
40°	812.5	823.0	840.4	863.1	871.8
42.5°	775.9	786.4	807.3	836.9	847.4
45°	737.5	749.8	775.9	809.0	823.0
47.5°	699.2	713.1	742.8	781.1	796.8
50°	655.6	673.0	709.6	753.2	770.7
52.5°	613.7	634.7	674.8	723.6	746.3
55°	570.2	591.1	643.4	694.0	718.4
57.5°	521.3	549.2	606.8	664.3	690.5
60°	476.0	502.2	571.9	634.7	660.8
62.5°	427.2	462.1	537.0	603.3	629.4
65°	376.6	415.0	500.4	566.7	592.8
67.5°	331.3	373.1	463.8	530.1	556.2
70°	277.2	329.5	423.7	490.0	516.1
72.5°	226.7	284.2	381.8	446.4	470.8
75°	177.8	242.4	338.3	395.8	408.0
77.5°	132.5	200.5	292.9	317.3	308.6
80°	94.2	160.4	228.4	216.2	221.4
82.5°	61.0	122.1	141.2	160.4	165.6
85°	34.9	71.5	87.2	94.2	97.6
87.5°	15.7	26.2	34.9	34.9	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)