

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: P263188

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263188
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-SQP-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3967.6 lumens
Efficiency: N/A
Efficacy: 72.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

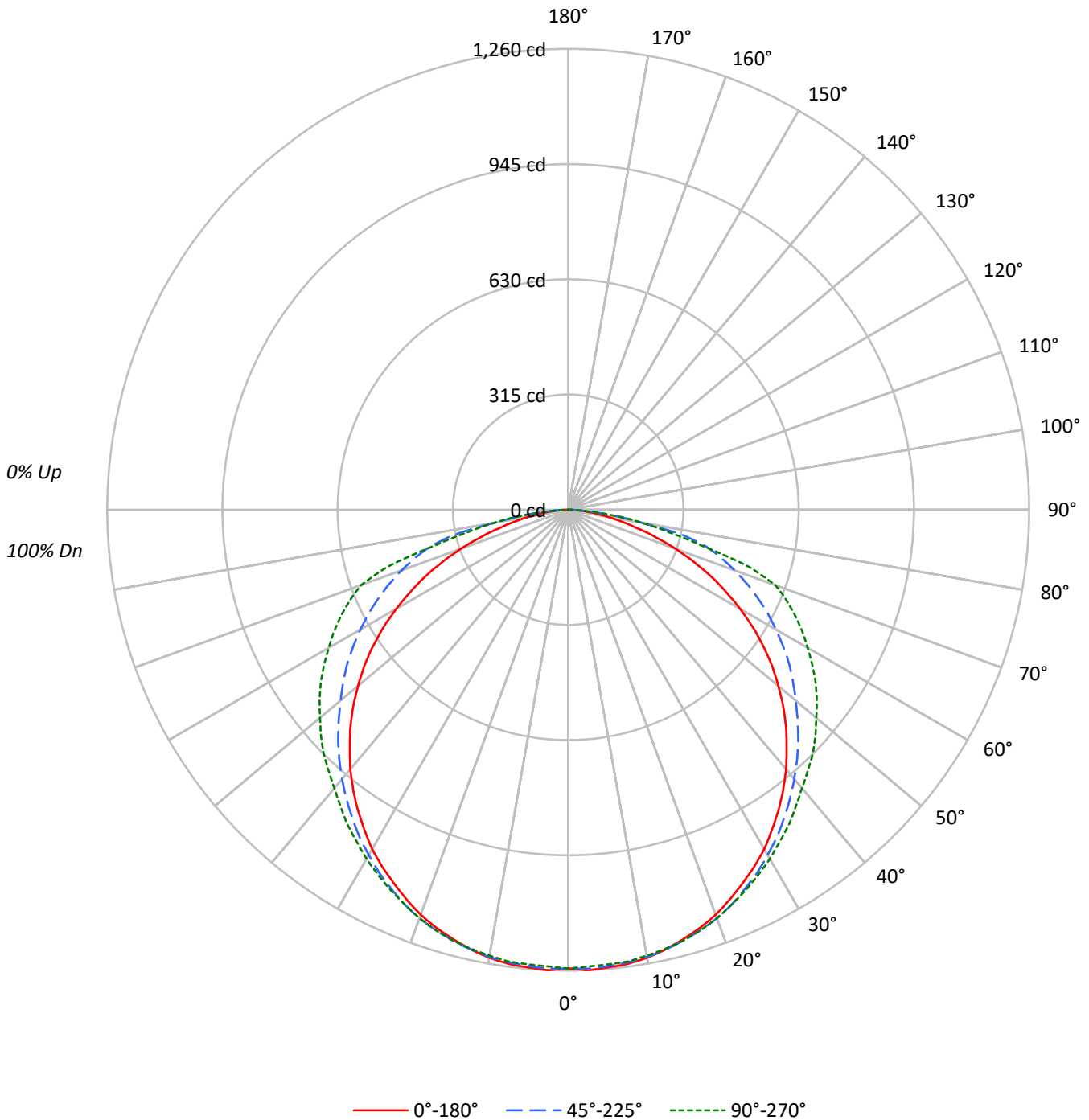
Input Watts (W): 54.680559
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1688	1688	1688
5°	1697	1691	1686
10°	1700	1697	1691
15°	1693	1699	1699
20°	1687	1702	1702
25°	1673	1698	1704
30°	1665	1694	1713
35°	1646	1690	1727
40°	1627	1688	1746
45°	1603	1692	1798
50°	1570	1699	1853
55°	1529	1731	1937
60°	1461	1765	2035
65°	1370	1820	2179
70°	1225	1903	2370
75°	1012	2035	1960
80°	826	1572	1588
85°	664	1044	980



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	3.0
10°-20°	343.7	8.7
20°-30°	525.3	13.2
30°-40°	642.5	16.2
40°-50°	687.5	17.3
50°-60°	658.3	16.6
60°-70°	556.9	14.0
70°-80°	353.0	8.9
80°-90°	81.2	2.0
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°	988.2	24.9
0°-40°	1630.7	41.1
0°-60°	2976.5	75.0
0°-90°	3967.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3967.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1256	1250	1252	1250	1248	120
15°	1215	1213	1219	1219	1219	343
25°	1127	1127	1144	1148	1148	520
35°	1002	1008	1029	1043	1051	627
45°	842	857	889	926	945	649
55°	652	672	738	799	826	581
65°	430	471	572	650	684	424
75°	195	275	391	389	377	212
85°	43	66	68	62	64	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.2	1254.2	1254.2	1254.2	1254.2
2.5°	1260.4	1254.2	1256.3	1254.2	1250.1
5°	1256.3	1250.1	1252.2	1250.1	1248.1
7.5°	1252.2	1246.0	1248.1	1246.0	1246.0
10°	1244.0	1237.8	1241.9	1239.9	1237.8
12.5°	1231.7	1227.6	1231.7	1229.6	1229.6
15°	1215.3	1213.2	1219.4	1219.4	1219.4
17.5°	1198.9	1196.8	1205.0	1205.0	1205.0
20°	1178.4	1176.4	1188.7	1188.7	1188.7
22.5°	1153.8	1151.8	1168.2	1168.2	1168.2
25°	1127.2	1127.2	1143.6	1147.7	1147.7
27.5°	1100.5	1100.5	1119.0	1125.1	1125.1
30°	1071.8	1071.8	1090.3	1098.5	1102.6
32.5°	1037.0	1041.1	1061.6	1071.8	1075.9
35°	1002.2	1008.3	1028.8	1043.1	1051.3
37.5°	965.3	971.4	996.0	1012.4	1022.6
40°	926.3	934.5	961.2	981.7	994.0
42.5°	883.3	895.6	926.3	953.0	969.4
45°	842.3	856.6	889.4	926.3	944.8
47.5°	797.2	813.6	850.5	897.6	916.1
50°	750.1	766.5	811.6	864.8	885.3
52.5°	702.9	721.4	774.7	832.1	856.6
55°	651.7	672.2	737.8	799.3	825.9
57.5°	598.4	623.0	696.8	762.4	791.1
60°	543.1	573.8	655.8	725.5	756.2
62.5°	485.7	522.6	614.8	688.6	721.4
65°	430.4	471.4	571.8	649.7	684.5
67.5°	370.9	422.2	528.7	612.8	645.6
70°	311.5	370.9	483.7	569.7	602.5
72.5°	252.1	323.8	438.6	516.4	516.4
75°	194.7	274.6	391.4	389.4	377.1
77.5°	147.6	229.5	321.8	274.6	276.7
80°	106.6	184.4	202.9	202.9	204.9
82.5°	71.7	141.4	131.2	129.1	133.2
85°	43.0	65.6	67.6	61.5	63.5
87.5°	20.5	22.5	18.4	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)