

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: P263114

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263114  
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-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4901.0 lumens  
Efficiency: N/A  
Efficacy: 89.3 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

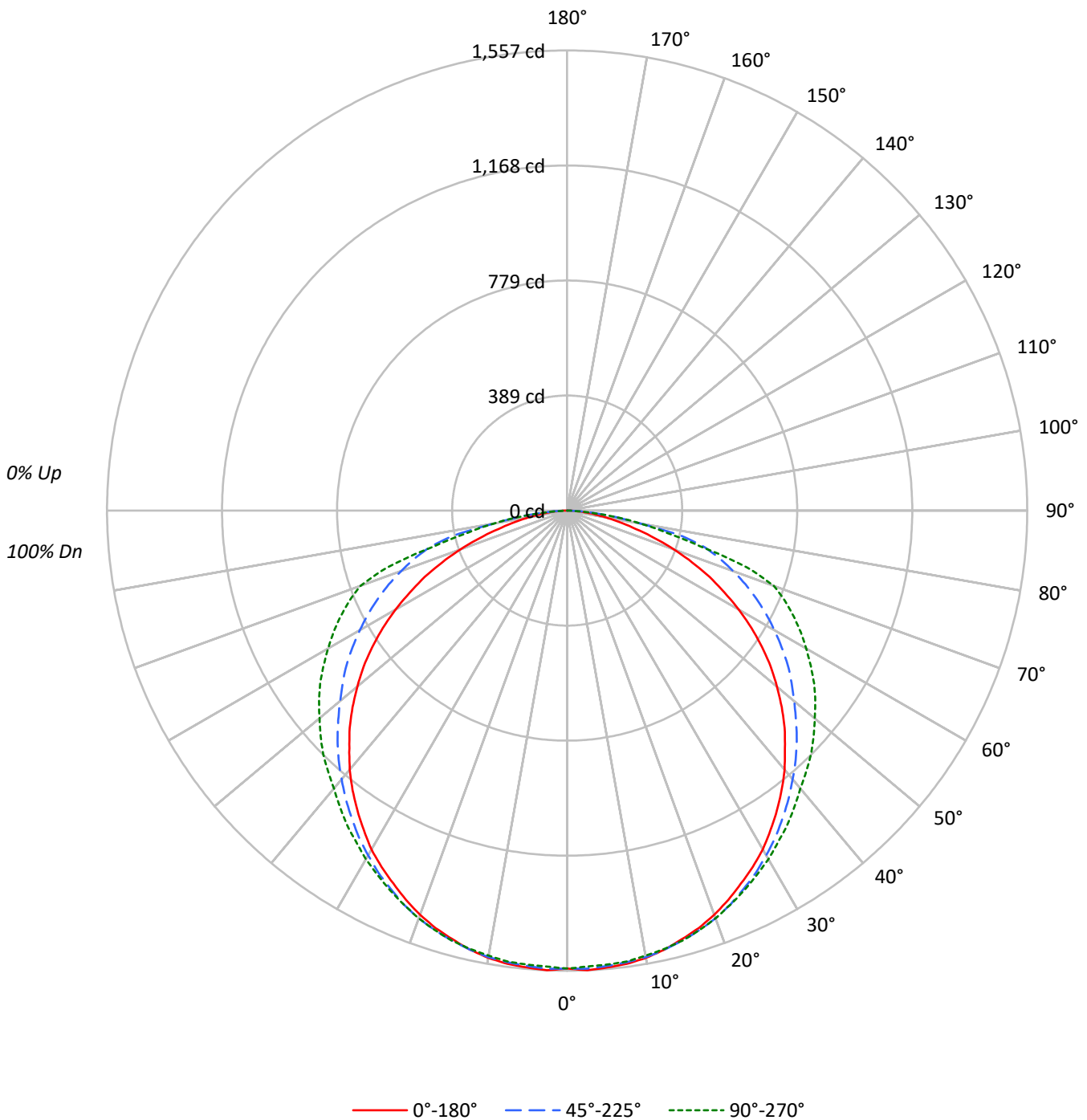
Input Watts (W): 54.895203  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2085	2085	2085
5°	2096	2089	2082
10°	2099	2096	2089
15°	2091	2098	2098
20°	2084	2102	2102
25°	2067	2097	2105
30°	2057	2092	2116
35°	2033	2087	2133
40°	2010	2085	2157
45°	1980	2091	2221
50°	1939	2098	2289
55°	1888	2138	2393
60°	1805	2180	2514
65°	1692	2249	2692
70°	1514	2350	2928
75°	1250	2514	2421
80°	1020	1942	1962
85°	821	1289	1212



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.1	3.0
10°-20°	424.6	8.7
20°-30°	648.9	13.2
30°-40°	793.7	16.2
40°-50°	849.2	17.3
50°-60°	813.2	16.6
60°-70°	687.9	14.0
70°-80°	436.0	8.9
80°-90°	100.3	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°	1220.7	24.9
0°-40°	2014.3	41.1
0°-60°	3676.7	75.0
0°-90°	4901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4901.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1549	1549	1549	1549	1549	
5°	1552	1544	1547	1544	1542	148
15°	1501	1499	1506	1506	1506	424
25°	1392	1392	1413	1418	1418	642
35°	1238	1246	1271	1289	1299	774
45°	1040	1058	1099	1144	1167	802
55°	805	830	911	987	1020	718
65°	532	582	706	802	846	524
75°	240	339	484	481	466	261
85°	53	81	84	76	78	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1549.3	1549.3	1549.3	1549.3	1549.3
2.5°	1556.9	1549.3	1551.8	1549.3	1544.2
5°	1551.8	1544.2	1546.8	1544.2	1541.7
7.5°	1546.8	1539.2	1541.7	1539.2	1539.2
10°	1536.6	1529.0	1534.1	1531.6	1529.0
12.5°	1521.5	1516.4	1521.5	1518.9	1518.9
15°	1501.2	1498.7	1506.3	1506.3	1506.3
17.5°	1480.9	1478.4	1488.5	1488.5	1488.5
20°	1455.6	1453.1	1468.3	1468.3	1468.3
22.5°	1425.3	1422.7	1443.0	1443.0	1443.0
25°	1392.3	1392.3	1412.6	1417.7	1417.7
27.5°	1359.4	1359.4	1382.2	1389.8	1389.8
30°	1324.0	1324.0	1346.8	1356.9	1362.0
32.5°	1281.0	1286.0	1311.3	1324.0	1329.1
35°	1237.9	1245.5	1270.8	1288.6	1298.7
37.5°	1192.4	1199.9	1230.3	1250.6	1263.2
40°	1144.3	1154.4	1187.3	1212.6	1227.8
42.5°	1091.1	1106.3	1144.3	1177.2	1197.4
45°	1040.5	1058.2	1098.7	1144.3	1167.0
47.5°	984.8	1005.0	1050.6	1108.8	1131.6
50°	926.5	946.8	1002.5	1068.3	1093.6
52.5°	868.3	891.1	956.9	1027.8	1058.2
55°	805.0	830.3	911.4	987.3	1020.2
57.5°	739.2	769.6	860.7	941.7	977.2
60°	670.9	708.8	810.1	896.2	934.1
62.5°	600.0	645.5	759.5	850.6	891.1
65°	531.6	582.3	706.3	802.5	845.5
67.5°	458.2	521.5	653.1	756.9	797.4
70°	384.8	458.2	597.4	703.8	744.3
72.5°	311.4	400.0	541.7	637.9	637.9
75°	240.5	339.2	483.5	481.0	465.8
77.5°	182.3	283.5	397.5	339.2	341.8
80°	131.6	227.8	250.6	250.6	253.2
82.5°	88.6	174.7	162.0	159.5	164.5
85°	53.2	81.0	83.5	75.9	78.5
87.5°	25.3	27.8	22.8	15.2	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)