

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: P263431

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263431  
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-L92765-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: 3994.0 lumens  
Efficiency: N/A  
Efficacy: 74.3 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

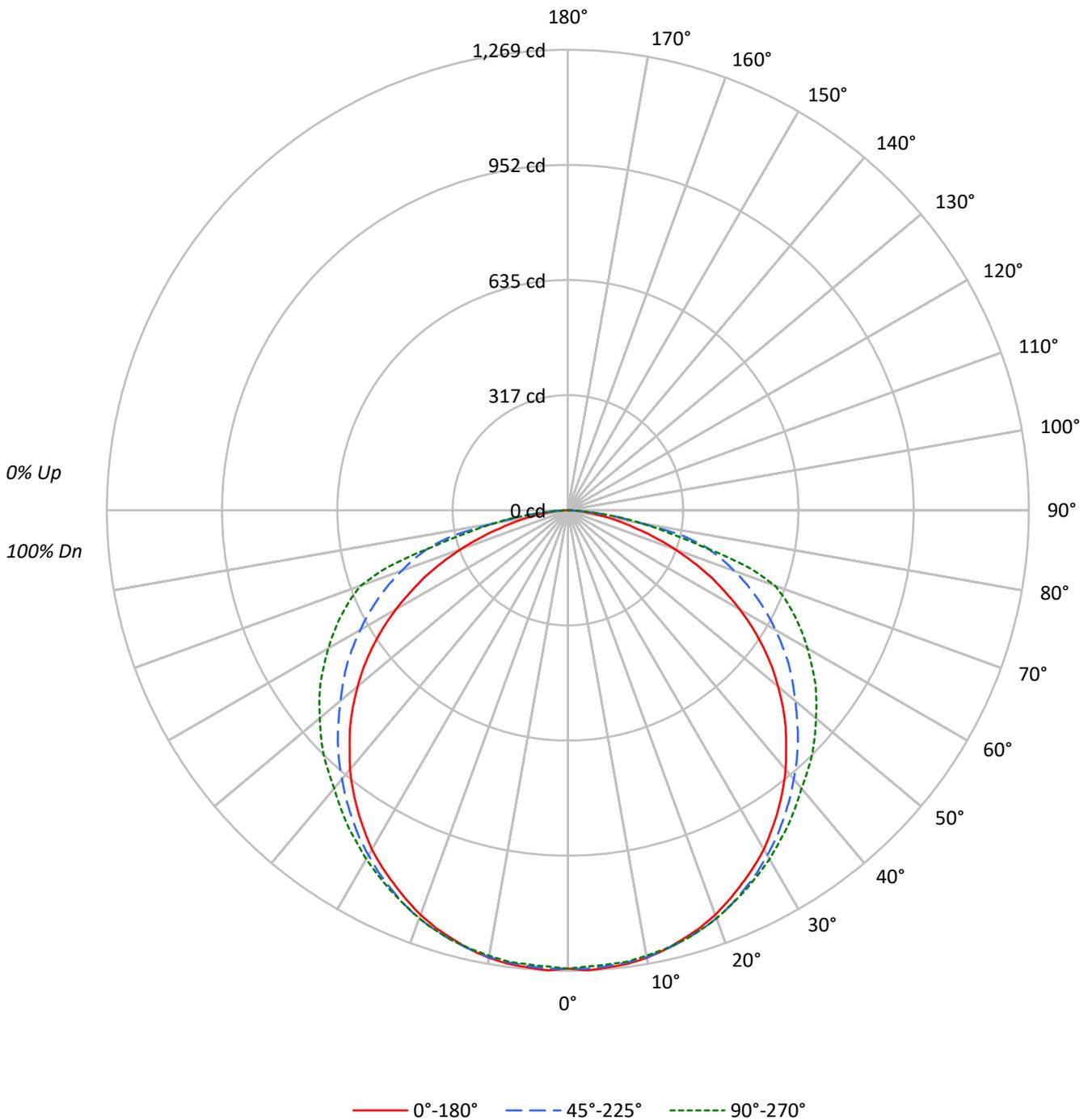
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1699	1699	1699
5°	1708	1702	1697
10°	1711	1708	1702
15°	1704	1710	1710
20°	1698	1713	1713
25°	1685	1709	1715
30°	1676	1705	1724
35°	1657	1701	1738
40°	1638	1700	1757
45°	1613	1704	1810
50°	1581	1710	1865
55°	1539	1742	1950
60°	1471	1777	2049
65°	1379	1833	2194
70°	1234	1915	2386
75°	1019	2048	1973
80°	831	1582	1598
85°	668	1051	988



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	3.0
10°-20°	346.0	8.7
20°-30°	528.8	13.2
30°-40°	646.8	16.2
40°-50°	692.1	17.3
50°-60°	662.7	16.6
60°-70°	560.6	14.0
70°-80°	355.4	8.9
80°-90°	81.7	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°	994.8	24.9
0°-40°	1641.6	41.1
0°-60°	2996.3	75.0
0°-90°	3994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3994.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1263	1263	1263	1263	1263	
5°	1265	1258	1260	1258	1256	120
15°	1223	1221	1228	1228	1228	346
25°	1135	1135	1151	1155	1155	524
35°	1009	1015	1036	1050	1058	631
45°	848	862	895	932	951	653
55°	656	677	743	805	831	585
65°	433	474	576	654	689	427
75°	196	276	394	392	380	213
85°	43	66	68	62	64	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1262.6	1262.6	1262.6	1262.6	1262.6
2.5°	1268.8	1262.6	1264.6	1262.6	1258.5
5°	1264.6	1258.5	1260.5	1258.5	1256.4
7.5°	1260.5	1254.3	1256.4	1254.3	1254.3
10°	1252.3	1246.1	1250.2	1248.1	1246.1
12.5°	1239.9	1235.8	1239.9	1237.8	1237.8
15°	1223.4	1221.3	1227.5	1227.5	1227.5
17.5°	1206.9	1204.8	1213.1	1213.1	1213.1
20°	1186.2	1184.2	1196.6	1196.6	1196.6
22.5°	1161.5	1159.4	1175.9	1175.9	1175.9
25°	1134.7	1134.7	1151.2	1155.3	1155.3
27.5°	1107.9	1107.9	1126.4	1132.6	1132.6
30°	1079.0	1079.0	1097.5	1105.8	1109.9
32.5°	1043.9	1048.0	1068.7	1079.0	1083.1
35°	1008.8	1015.0	1035.6	1050.1	1058.3
37.5°	971.7	977.9	1002.6	1019.1	1029.5
40°	932.5	940.7	967.6	988.2	1000.6
42.5°	889.2	901.5	932.5	959.3	975.8
45°	847.9	862.3	895.4	932.5	951.1
47.5°	802.5	819.0	856.2	903.6	922.2
50°	755.1	771.6	817.0	870.6	891.2
52.5°	707.6	726.2	779.8	837.6	862.3
55°	656.0	676.7	742.7	804.6	831.4
57.5°	602.4	627.2	701.4	767.4	796.3
60°	546.7	577.7	660.2	730.3	761.3
62.5°	488.9	526.1	618.9	693.2	726.2
65°	433.2	474.5	575.6	654.0	689.1
67.5°	373.4	425.0	532.3	616.8	649.9
70°	313.6	373.4	486.9	573.5	606.5
72.5°	253.8	326.0	441.5	519.9	519.9
75°	196.0	276.4	394.0	392.0	379.6
77.5°	148.5	231.1	323.9	276.4	278.5
80°	107.3	185.7	204.2	204.2	206.3
82.5°	72.2	142.3	132.0	130.0	134.1
85°	43.3	66.0	68.1	61.9	64.0
87.5°	20.6	22.7	18.6	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)