

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: P261013

Luminaire Tested: **24CZ-LD5-70-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261013  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-70-S-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7192.0 lumens  
Efficiency: N/A  
Efficacy: 134.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

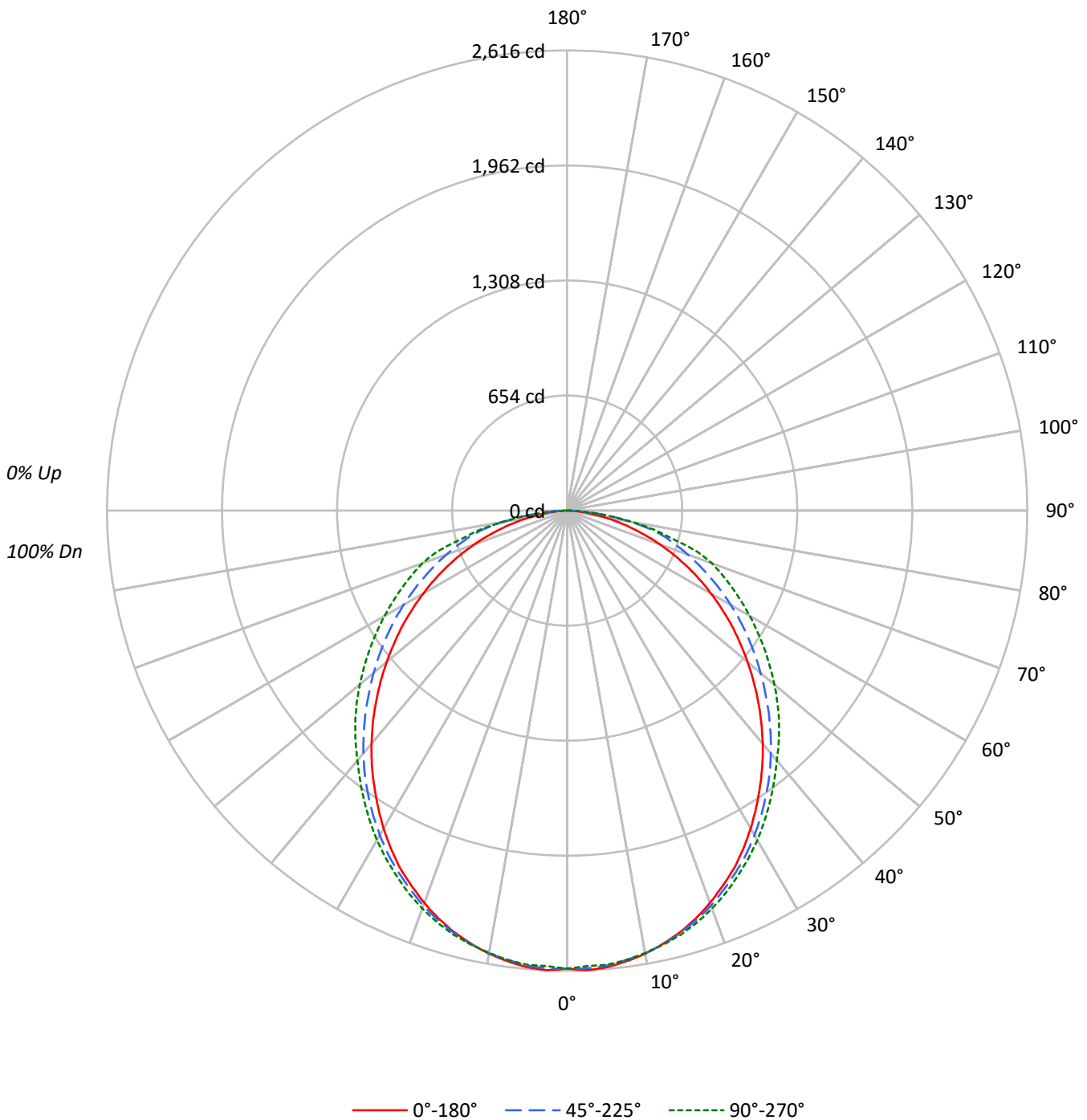
Input Watts (W): 53.661  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3503	3503	3503
5°	3520	3507	3500
10°	3495	3492	3489
15°	3457	3463	3477
20°	3399	3423	3447
25°	3332	3368	3403
30°	3242	3309	3361
35°	3141	3239	3306
40°	3039	3165	3257
45°	2923	3083	3242
50°	2805	3005	3221
55°	2683	2942	3211
60°	2544	2891	3226
65°	2392	2857	3291
70°	2203	2871	3446
75°	1953	2973	3210
80°	1632	2818	2892
85°	1220	2254	2069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.2	3.4
10°-20°	700.1	9.7
20°-30°	1043.3	14.5
30°-40°	1228.2	17.1
40°-50°	1248.1	17.4
50°-60°	1122.1	15.6
60°-70°	886.5	12.3
70°-80°	562.4	7.8
80°-90°	155.2	2.2
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°	1989.6	27.7
0°-40°	3217.7	44.7
0°-60°	5587.9	77.7
0°-90°	7192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7192.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2604	2604	2604	2604	2604	
5°	2606	2584	2596	2592	2592	247
15°	2482	2470	2486	2494	2496	699
25°	2245	2242	2269	2283	2292	1032
35°	1912	1924	1972	1993	2013	1196
45°	1536	1558	1620	1668	1704	1185
55°	1144	1173	1254	1335	1369	1022
65°	751	790	897	996	1034	744
75°	376	440	572	622	617	400
85°	79	136	146	134	134	97
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2603.6	2603.6	2603.6	2603.6	2603.6
2.5°	2615.6	2596.5	2606.0	2601.2	2591.7
5°	2606.0	2584.5	2596.5	2591.7	2591.7
7.5°	2584.5	2567.7	2577.3	2574.9	2577.3
10°	2558.2	2541.4	2555.8	2555.8	2553.4
12.5°	2522.3	2507.9	2524.7	2524.7	2527.1
15°	2481.6	2469.6	2486.4	2493.6	2495.9
17.5°	2431.3	2419.4	2440.9	2448.1	2455.3
20°	2373.9	2369.1	2390.7	2397.8	2407.4
22.5°	2309.3	2309.3	2330.8	2340.4	2354.8
25°	2244.7	2242.3	2268.6	2283.0	2292.5
27.5°	2168.1	2170.5	2204.0	2218.4	2230.3
30°	2086.7	2091.5	2129.8	2146.6	2163.3
32.5°	2000.6	2010.2	2053.2	2072.4	2089.1
35°	1912.0	1924.0	1971.9	1993.4	2012.6
37.5°	1823.5	1840.3	1890.5	1912.0	1933.6
40°	1730.2	1744.5	1802.0	1828.3	1854.6
42.5°	1634.5	1653.6	1711.0	1749.3	1780.4
45°	1536.3	1557.9	1620.1	1668.0	1703.9
47.5°	1438.2	1466.9	1526.8	1591.4	1622.5
50°	1340.1	1368.8	1435.8	1507.6	1538.7
52.5°	1239.6	1268.3	1344.9	1419.1	1452.6
55°	1143.9	1172.6	1254.0	1335.3	1368.8
57.5°	1043.4	1074.5	1165.4	1249.2	1282.7
60°	945.3	976.4	1074.5	1163.0	1198.9
62.5°	849.5	883.0	985.9	1079.3	1115.2
65°	751.4	789.7	897.4	995.5	1033.8
67.5°	655.7	698.8	811.2	914.1	954.8
70°	560.0	610.2	729.9	835.2	875.9
72.5°	466.6	521.7	648.5	753.8	775.3
75°	375.7	440.3	571.9	622.2	617.4
77.5°	289.6	361.4	485.8	495.4	509.7
80°	210.6	289.6	363.7	382.9	373.3
82.5°	138.8	217.8	260.8	251.3	248.9
85°	79.0	136.4	146.0	134.0	134.0
87.5°	33.5	55.0	47.9	35.9	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)