

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: P261183

Luminaire Tested: **24CZ-LD5-60-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261183  
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-LD5-60-S-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6415.0 lumens  
Efficiency: N/A  
Efficacy: 141.1 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

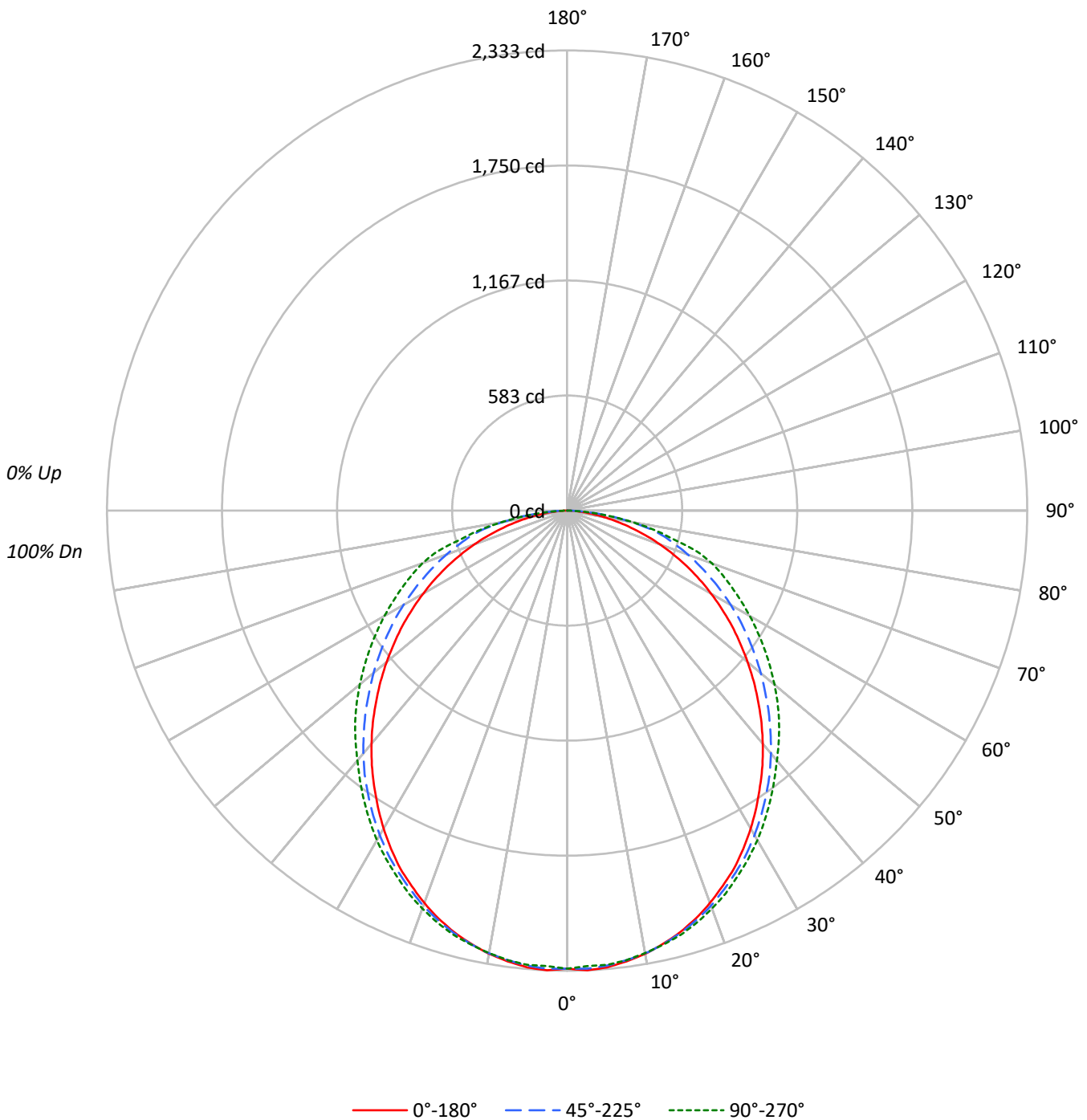
Input Watts (W): 45.477  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3125	3125	3125
5°	3140	3128	3122
10°	3117	3115	3112
15°	3083	3089	3101
20°	3032	3053	3075
25°	2972	3004	3036
30°	2892	2951	2998
35°	2801	2889	2949
40°	2711	2823	2905
45°	2608	2750	2892
50°	2502	2681	2873
55°	2393	2624	2864
60°	2269	2579	2878
65°	2134	2548	2936
70°	1965	2561	3073
75°	1742	2652	2863
80°	1455	2514	2580
85°	1087	2010	1845



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.6	3.4
10°-20°	624.5	9.7
20°-30°	930.6	14.5
30°-40°	1095.5	17.1
40°-50°	1113.2	17.4
50°-60°	1000.9	15.6
60°-70°	790.7	12.3
70°-80°	501.6	7.8
80°-90°	138.4	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°	1774.6	27.7
0°-40°	2870.1	44.7
0°-60°	4984.2	77.7
0°-90°	6415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6415.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2322	2322	2322	2322	2322	
5°	2324	2305	2316	2312	2312	220
15°	2214	2203	2218	2224	2226	624
25°	2002	2000	2024	2036	2045	921
35°	1706	1716	1759	1778	1795	1067
45°	1370	1390	1445	1488	1520	1057
55°	1020	1046	1118	1191	1221	911
65°	670	704	800	888	922	664
75°	335	393	510	555	551	357
85°	70	122	130	120	120	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2322.3	2322.3	2322.3	2322.3	2322.3
2.5°	2333.0	2315.9	2324.5	2320.2	2311.7
5°	2324.5	2305.3	2315.9	2311.7	2311.7
7.5°	2305.3	2290.3	2298.9	2296.7	2298.9
10°	2281.8	2266.9	2279.7	2279.7	2277.5
12.5°	2249.8	2237.0	2251.9	2251.9	2254.0
15°	2213.5	2202.8	2217.8	2224.2	2226.3
17.5°	2168.7	2158.0	2177.2	2183.6	2190.0
20°	2117.4	2113.2	2132.4	2138.8	2147.3
22.5°	2059.8	2059.8	2079.0	2087.6	2100.4
25°	2002.2	2000.0	2023.5	2036.3	2044.9
27.5°	1933.9	1936.0	1965.9	1978.7	1989.4
30°	1861.3	1865.6	1899.7	1914.7	1929.6
32.5°	1784.5	1793.0	1831.4	1848.5	1863.4
35°	1705.5	1716.1	1758.8	1778.0	1795.1
37.5°	1626.5	1641.4	1686.3	1705.5	1724.7
40°	1543.3	1556.1	1607.3	1630.8	1654.2
42.5°	1457.9	1474.9	1526.2	1560.3	1588.1
45°	1370.4	1389.6	1445.1	1487.8	1519.8
47.5°	1282.8	1308.5	1361.8	1419.4	1447.2
50°	1195.3	1220.9	1280.7	1344.7	1372.5
52.5°	1105.7	1131.3	1199.6	1265.8	1295.6
55°	1020.3	1045.9	1118.5	1191.1	1220.9
57.5°	930.6	958.4	1039.5	1114.2	1144.1
60°	843.1	870.9	958.4	1037.4	1069.4
62.5°	757.8	787.6	879.4	962.7	994.7
65°	670.2	704.4	800.4	888.0	922.1
67.5°	584.9	623.3	723.6	815.4	851.7
70°	499.5	544.3	651.0	744.9	781.2
72.5°	416.2	465.3	578.5	672.4	691.6
75°	335.1	392.8	510.1	555.0	550.7
77.5°	258.3	322.3	433.3	441.8	454.7
80°	187.8	258.3	324.4	341.5	333.0
82.5°	123.8	194.2	232.7	224.1	222.0
85°	70.4	121.7	130.2	119.5	119.5
87.5°	29.9	49.1	42.7	32.0	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)