

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: P261181

Luminaire Tested: **24CZ-LD5-60-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261181  
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-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6335.0 lumens  
Efficiency: N/A  
Efficacy: 139.9 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

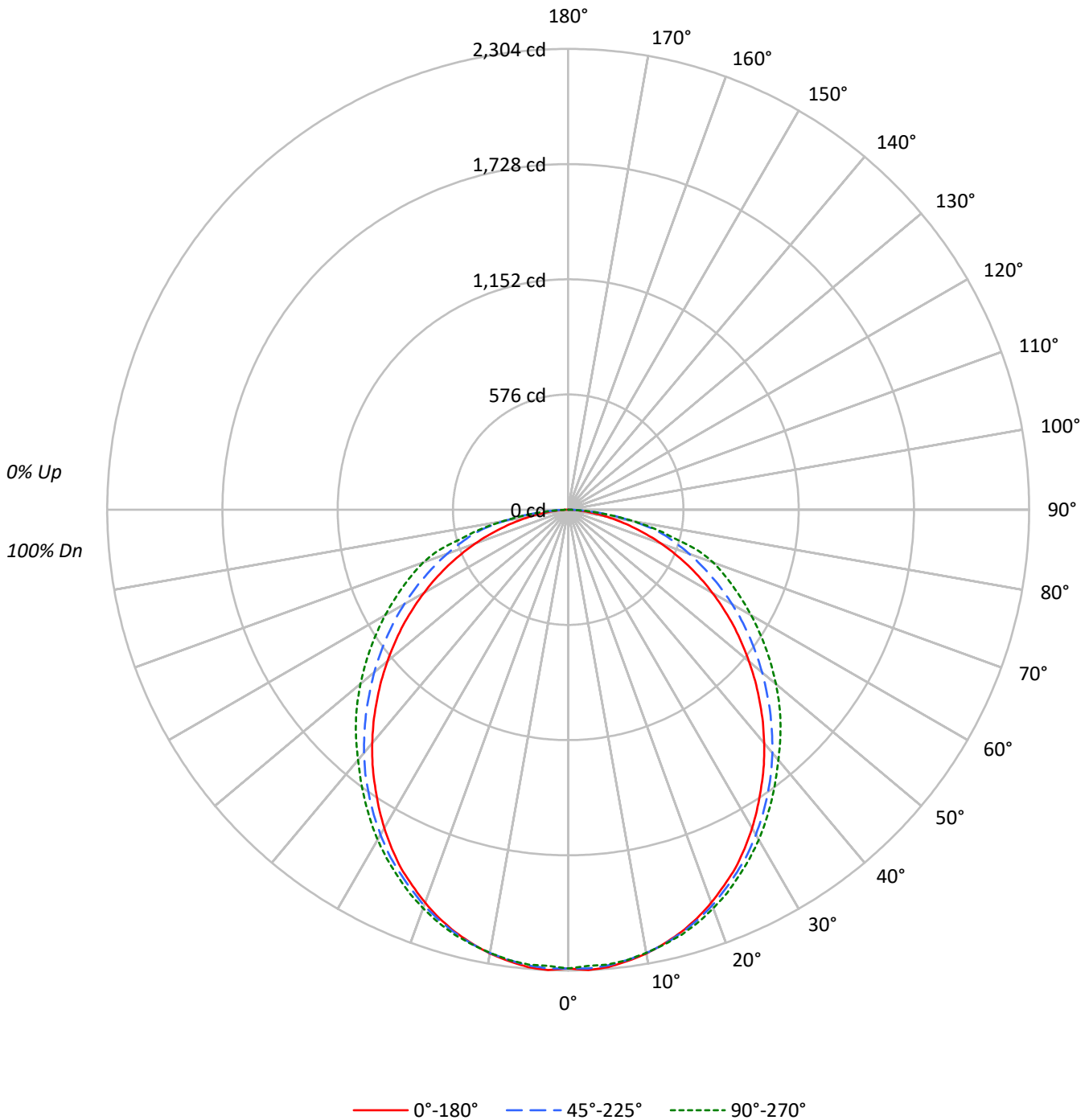
Input Watts (W): 45.291  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3086	3086	3086
5°	3100	3089	3083
10°	3079	3076	3073
15°	3045	3051	3062
20°	2994	3015	3036
25°	2935	2967	2998
30°	2856	2915	2960
35°	2766	2853	2912
40°	2677	2788	2869
45°	2575	2715	2856
50°	2471	2647	2837
55°	2364	2591	2828
60°	2241	2547	2842
65°	2107	2517	2899
70°	1940	2529	3035
75°	1720	2619	2827
80°	1437	2483	2548
85°	1074	1985	1822



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.8	3.4
10°-20°	616.7	9.7
20°-30°	919.0	14.5
30°-40°	1081.8	17.1
40°-50°	1099.3	17.4
50°-60°	988.4	15.6
60°-70°	780.9	12.3
70°-80°	495.4	7.8
80°-90°	136.7	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°	1752.5	27.7
0°-40°	2834.3	44.7
0°-60°	4922.0	77.7
0°-90°	6335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2293	2293	2293	2293	2293	
5°	2296	2276	2287	2283	2283	218
15°	2186	2175	2190	2196	2198	616
25°	1977	1975	1998	2011	2019	909
35°	1684	1695	1737	1756	1773	1054
45°	1353	1372	1427	1469	1501	1044
55°	1008	1033	1104	1176	1206	900
65°	662	696	790	877	911	656
75°	331	388	504	548	544	352
85°	70	120	129	118	118	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2293.4	2293.4	2293.4	2293.4	2293.4
2.5°	2303.9	2287.1	2295.5	2291.3	2282.8
5°	2295.5	2276.5	2287.1	2282.8	2282.8
7.5°	2276.5	2261.8	2270.2	2268.1	2270.2
10°	2253.3	2238.6	2251.2	2251.2	2249.1
12.5°	2221.7	2209.1	2223.8	2223.8	2225.9
15°	2185.9	2175.3	2190.1	2196.4	2198.5
17.5°	2141.6	2131.1	2150.0	2156.4	2162.7
20°	2091.0	2086.8	2105.8	2112.1	2120.5
22.5°	2034.1	2034.1	2053.1	2061.5	2074.2
25°	1977.2	1975.1	1998.3	2010.9	2019.4
27.5°	1909.8	1911.9	1941.4	1954.0	1964.6
30°	1838.1	1842.3	1876.0	1890.8	1905.5
32.5°	1762.2	1770.6	1808.6	1825.4	1840.2
35°	1684.2	1694.7	1736.9	1755.9	1772.7
37.5°	1606.2	1621.0	1665.2	1684.2	1703.2
40°	1524.0	1536.7	1587.2	1610.4	1633.6
42.5°	1439.7	1456.6	1507.1	1540.9	1568.3
45°	1353.3	1372.2	1427.0	1469.2	1500.8
47.5°	1266.8	1292.1	1344.8	1401.7	1429.2
50°	1180.4	1205.7	1264.7	1328.0	1355.4
52.5°	1091.9	1117.2	1184.6	1250.0	1279.5
55°	1007.6	1032.9	1104.5	1176.2	1205.7
57.5°	919.0	946.4	1026.5	1100.3	1129.8
60°	832.6	860.0	946.4	1024.4	1056.1
62.5°	748.3	777.8	868.5	950.7	982.3
65°	661.9	695.6	790.5	876.9	910.6
67.5°	577.6	615.5	714.6	805.2	841.0
70°	493.2	537.5	642.9	735.7	771.5
72.5°	411.0	459.5	571.2	664.0	683.0
75°	330.9	387.9	503.8	548.1	543.8
77.5°	255.1	318.3	427.9	436.3	449.0
80°	185.5	255.1	320.4	337.3	328.8
82.5°	122.3	191.8	229.8	221.3	219.2
85°	69.6	120.1	128.6	118.0	118.0
87.5°	29.5	48.5	42.2	31.6	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)