

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: P261209

Luminaire Tested: **24CZ-LD5-75-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261209  
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-LD5-75-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7995.0 lumens  
Efficiency: N/A  
Efficacy: 133.1 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

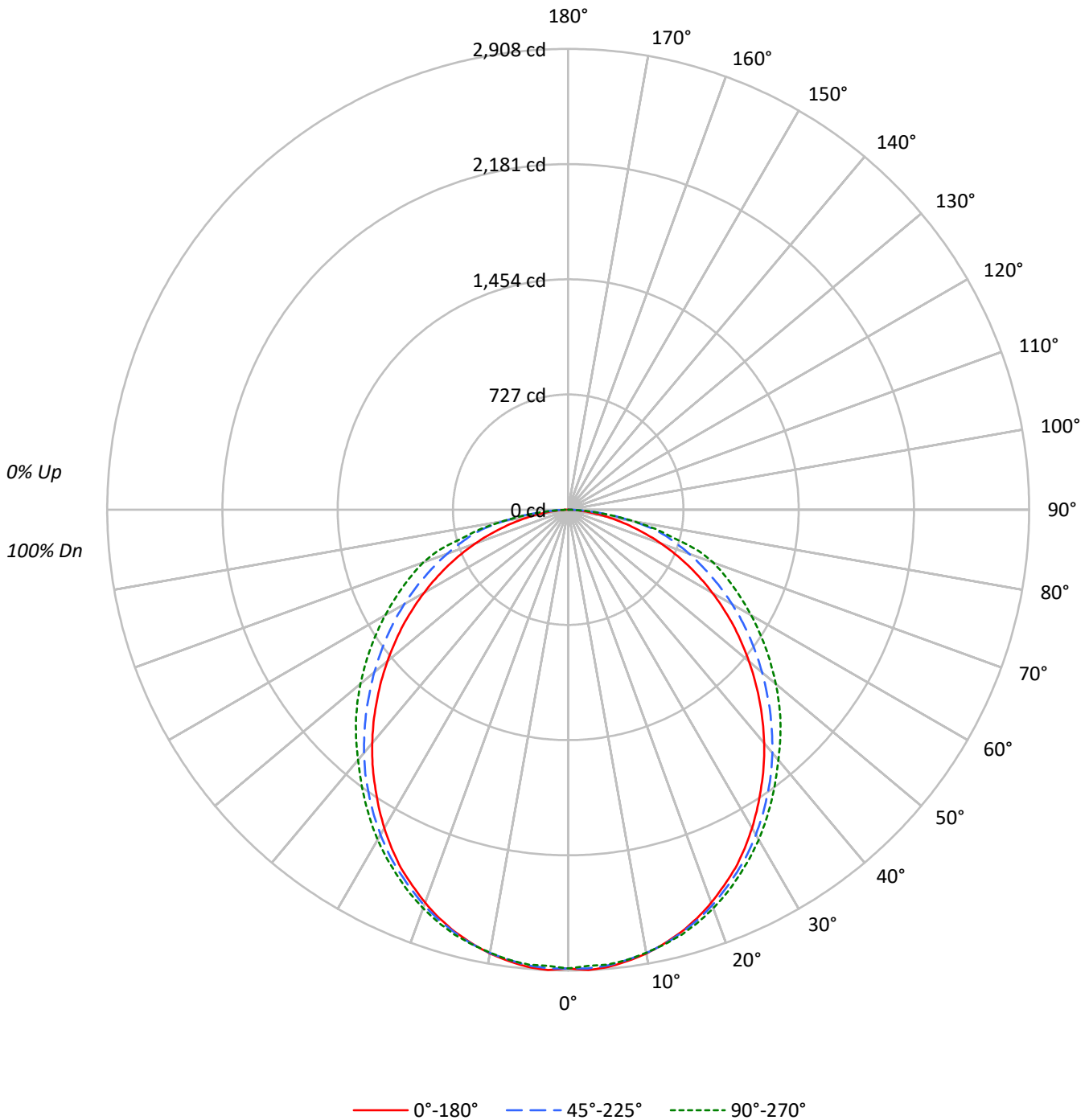
Input Watts (W): 60.078  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3894	3894	3894
5°	3913	3898	3891
10°	3885	3882	3878
15°	3843	3850	3865
20°	3779	3805	3832
25°	3704	3744	3783
30°	3604	3678	3736
35°	3491	3600	3675
40°	3378	3518	3621
45°	3250	3427	3604
50°	3118	3341	3580
55°	2983	3270	3570
60°	2828	3214	3587
65°	2659	3176	3659
70°	2449	3192	3830
75°	2171	3305	3568
80°	1814	3133	3216
85°	1355	2506	2300



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.6	3.4
10°-20°	778.3	9.7
20°-30°	1159.8	14.5
30°-40°	1365.3	17.1
40°-50°	1387.4	17.4
50°-60°	1247.4	15.6
60°-70°	985.5	12.3
70°-80°	625.2	7.8
80°-90°	172.5	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°	2211.7	27.7
0°-40°	3577.0	44.7
0°-60°	6211.8	77.7
0°-90°	7995.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7995.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2894	2894	2894	2894	2894	
5°	2897	2873	2886	2881	2881	275
15°	2759	2745	2764	2772	2775	777
25°	2495	2493	2522	2538	2548	1147
35°	2126	2139	2192	2216	2237	1330
45°	1708	1732	1801	1854	1894	1318
55°	1272	1304	1394	1484	1522	1136
65°	835	878	998	1107	1149	827
75°	418	490	636	692	686	445
85°	88	152	162	149	149	108
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2894.3	2894.3	2894.3	2894.3	2894.3
2.5°	2907.6	2886.4	2897.0	2891.7	2881.0
5°	2897.0	2873.1	2886.4	2881.0	2881.0
7.5°	2873.1	2854.4	2865.1	2862.4	2865.1
10°	2843.8	2825.2	2841.1	2841.1	2838.5
12.5°	2803.9	2787.9	2806.5	2806.5	2809.2
15°	2758.7	2745.4	2764.0	2772.0	2774.6
17.5°	2702.8	2689.5	2713.4	2721.4	2729.4
20°	2639.0	2633.6	2657.6	2665.6	2676.2
22.5°	2567.1	2567.1	2591.1	2601.7	2617.7
25°	2495.3	2492.6	2521.9	2537.9	2548.5
27.5°	2410.2	2412.8	2450.1	2466.0	2479.3
30°	2319.7	2325.0	2367.6	2386.2	2404.9
32.5°	2224.0	2234.6	2282.5	2303.8	2322.4
35°	2125.5	2138.8	2192.0	2216.0	2237.3
37.5°	2027.1	2045.7	2101.6	2125.5	2149.5
40°	1923.4	1939.3	2003.2	2032.4	2061.7
42.5°	1816.9	1838.2	1902.1	1944.6	1979.2
45°	1707.9	1731.8	1801.0	1854.2	1894.1
47.5°	1598.8	1630.7	1697.2	1769.1	1803.6
50°	1489.7	1521.7	1596.1	1675.9	1710.5
52.5°	1378.0	1409.9	1495.1	1577.5	1614.8
55°	1271.6	1303.5	1394.0	1484.4	1521.7
57.5°	1159.9	1194.4	1295.5	1388.6	1425.9
60°	1050.8	1085.4	1194.4	1292.9	1332.8
62.5°	944.4	981.6	1096.0	1199.8	1239.7
65°	835.3	877.9	997.6	1106.7	1149.2
67.5°	728.9	776.8	901.8	1016.2	1061.4
70°	622.5	678.4	811.4	928.4	973.6
72.5°	518.7	579.9	720.9	838.0	861.9
75°	417.7	489.5	635.8	691.7	686.3
77.5°	321.9	401.7	540.0	550.7	566.6
80°	234.1	321.9	404.4	425.6	415.0
82.5°	154.3	242.1	290.0	279.3	276.7
85°	87.8	151.6	162.3	149.0	149.0
87.5°	37.2	61.2	53.2	39.9	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)