

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: P261018

Luminaire Tested: **24CZ-LD5-75-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261018  
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-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: 7689.0 lumens  
Efficiency: N/A  
Efficacy: 131.7 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

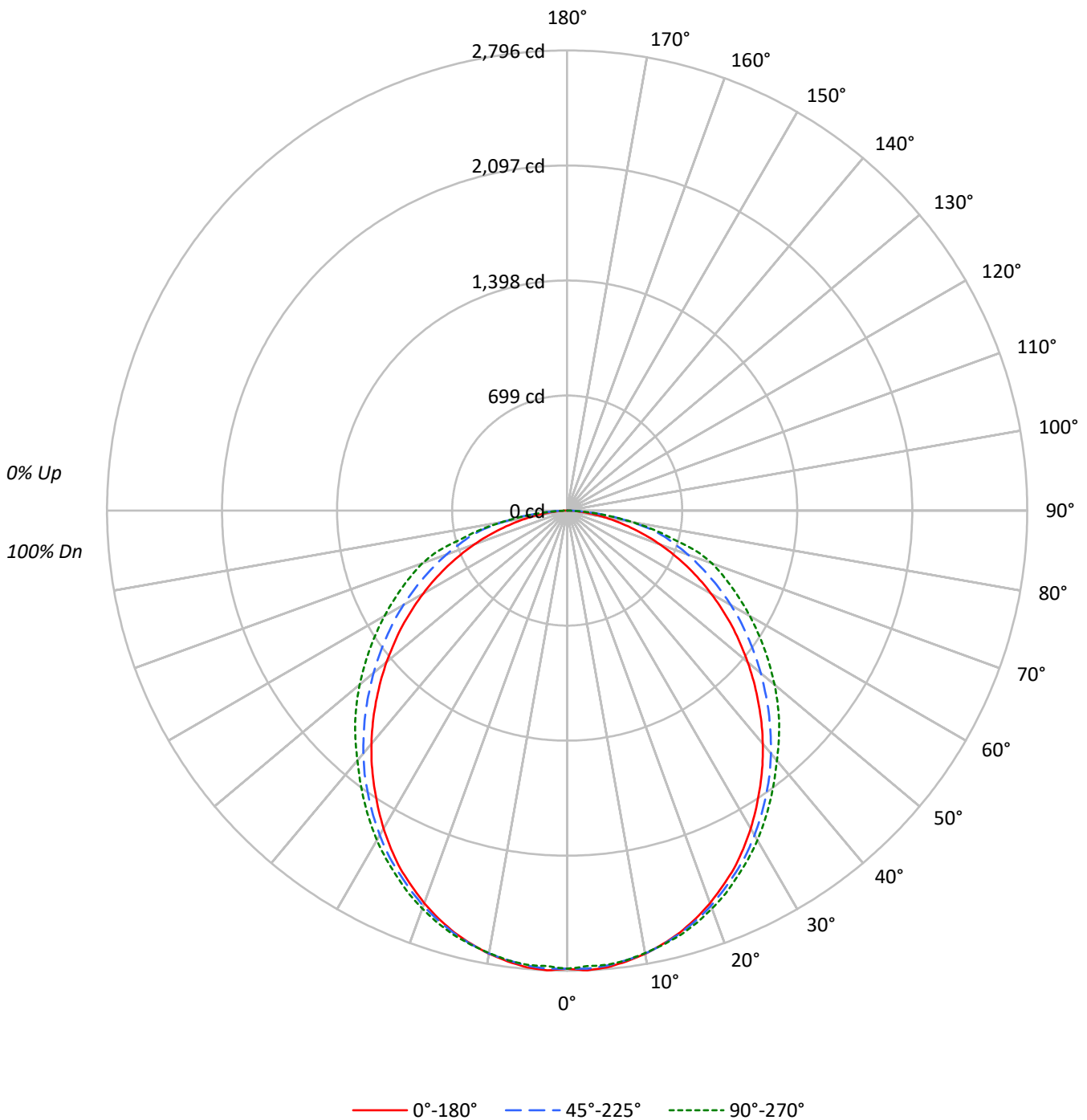
Input Watts (W): 58.404  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3745	3745	3745
5°	3763	3749	3742
10°	3737	3733	3730
15°	3696	3703	3717
20°	3634	3660	3685
25°	3563	3601	3639
30°	3466	3538	3593
35°	3358	3463	3534
40°	3249	3384	3483
45°	3125	3296	3466
50°	2999	3213	3444
55°	2869	3145	3433
60°	2720	3091	3449
65°	2557	3054	3519
70°	2355	3070	3684
75°	2088	3179	3432
80°	1744	3013	3092
85°	1303	2410	2212



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.2	3.4
10°-20°	748.5	9.7
20°-30°	1115.4	14.5
30°-40°	1313.0	17.1
40°-50°	1334.3	17.4
50°-60°	1199.6	15.6
60°-70°	947.7	12.3
70°-80°	601.3	7.8
80°-90°	165.9	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°	2127.1	27.7
0°-40°	3440.1	44.7
0°-60°	5974.1	77.7
0°-90°	7689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7689.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2784	2784	2784	2784	2784	
5°	2786	2763	2776	2771	2771	264
15°	2653	2640	2658	2666	2668	747
25°	2400	2397	2425	2441	2451	1103
35°	2044	2057	2108	2131	2152	1279
45°	1642	1666	1732	1783	1822	1267
55°	1223	1254	1341	1428	1463	1092
65°	803	844	959	1064	1105	796
75°	402	471	612	665	660	428
85°	84	146	156	143	143	104
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2783.6	2783.6	2783.6	2783.6	2783.6
2.5°	2796.4	2775.9	2786.1	2781.0	2770.8
5°	2786.1	2763.1	2775.9	2770.8	2770.8
7.5°	2763.1	2745.2	2755.4	2752.9	2755.4
10°	2734.9	2717.0	2732.4	2732.4	2729.8
12.5°	2696.6	2681.2	2699.1	2699.1	2701.7
15°	2653.1	2640.3	2658.2	2665.9	2668.4
17.5°	2599.4	2586.6	2609.6	2617.3	2624.9
20°	2538.0	2532.8	2555.9	2563.5	2573.8
22.5°	2468.9	2468.9	2491.9	2502.1	2517.5
25°	2399.8	2397.2	2425.4	2440.7	2451.0
27.5°	2317.9	2320.5	2356.3	2371.7	2384.4
30°	2230.9	2236.1	2277.0	2294.9	2312.8
32.5°	2138.8	2149.1	2195.1	2215.6	2233.5
35°	2044.2	2057.0	2108.1	2131.2	2151.6
37.5°	1949.5	1967.4	2021.2	2044.2	2067.2
40°	1849.7	1865.1	1926.5	1954.6	1982.8
42.5°	1747.4	1767.9	1829.3	1870.2	1903.5
45°	1642.5	1665.5	1732.0	1783.2	1821.6
47.5°	1537.6	1568.3	1632.3	1701.3	1734.6
50°	1432.7	1463.4	1535.1	1611.8	1645.1
52.5°	1325.3	1356.0	1437.8	1517.1	1553.0
55°	1222.9	1253.6	1340.6	1427.6	1463.4
57.5°	1115.5	1148.7	1245.9	1335.5	1371.3
60°	1010.6	1043.8	1148.7	1243.4	1281.8
62.5°	908.2	944.1	1054.1	1153.8	1192.2
65°	803.3	844.3	959.4	1064.3	1105.2
67.5°	701.0	747.1	867.3	977.3	1020.8
70°	598.7	652.4	780.3	892.9	936.4
72.5°	498.9	557.7	693.3	805.9	828.9
75°	401.7	470.7	611.5	665.2	660.1
77.5°	309.6	386.3	519.4	529.6	544.9
80°	225.1	309.6	388.9	409.3	399.1
82.5°	148.4	232.8	278.9	268.6	266.1
85°	84.4	145.8	156.1	143.3	143.3
87.5°	35.8	58.8	51.2	38.4	35.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)