

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: P263415

Luminaire Tested: **24CZ-LD5-60-SQP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-60-SQP-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3618.0 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

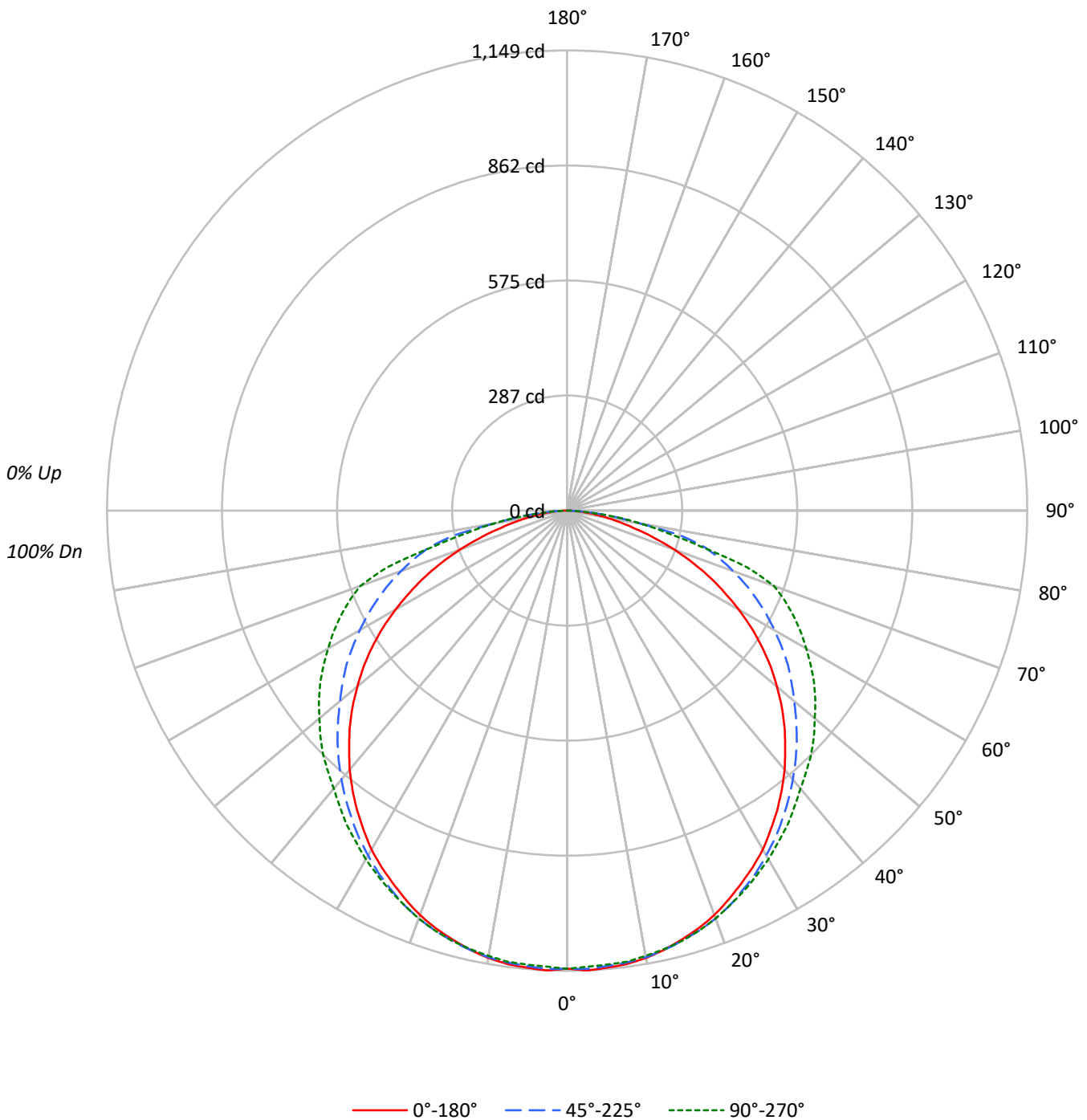
Input Watts (W): 45.105  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1539	1539	1539
5°	1547	1542	1537
10°	1550	1547	1542
15°	1544	1549	1549
20°	1539	1552	1552
25°	1526	1548	1554
30°	1519	1545	1562
35°	1501	1541	1575
40°	1484	1539	1592
45°	1462	1543	1639
50°	1432	1549	1690
55°	1394	1578	1767
60°	1333	1609	1856
65°	1250	1660	1987
70°	1118	1735	2161
75°	923	1855	1788
80°	753	1433	1448
85°	605	953	894



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.6	3.0
10°-20°	313.4	8.7
20°-30°	479.1	13.2
30°-40°	585.9	16.2
40°-50°	626.9	17.3
50°-60°	600.3	16.6
60°-70°	507.8	14.0
70°-80°	321.9	8.9
80°-90°	74.0	2.0
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°	901.1	24.9
0°-40°	1487.0	41.1
0°-60°	2714.2	75.0
0°-90°	3618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3618.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1146	1140	1142	1140	1138	109
15°	1108	1106	1112	1112	1112	313
25°	1028	1028	1043	1046	1046	474
35°	914	920	938	951	959	572
45°	768	781	811	845	862	592
55°	594	613	673	729	753	530
65°	392	430	521	592	624	387
75°	178	250	357	355	344	193
85°	39	60	62	56	58	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1143.7	1143.7	1143.7	1143.7	1143.7
2.5°	1149.3	1143.7	1145.6	1143.7	1140.0
5°	1145.6	1140.0	1141.8	1140.0	1138.1
7.5°	1141.8	1136.2	1138.1	1136.2	1136.2
10°	1134.4	1128.8	1132.5	1130.6	1128.8
12.5°	1123.2	1119.4	1123.2	1121.3	1121.3
15°	1108.2	1106.3	1111.9	1111.9	1111.9
17.5°	1093.3	1091.4	1098.9	1098.9	1098.9
20°	1074.6	1072.7	1083.9	1083.9	1083.9
22.5°	1052.1	1050.3	1065.2	1065.2	1065.2
25°	1027.9	1027.9	1042.8	1046.5	1046.5
27.5°	1003.6	1003.6	1020.4	1026.0	1026.0
30°	977.4	977.4	994.2	1001.7	1005.4
32.5°	945.6	949.4	968.0	977.4	981.1
35°	913.9	919.5	938.1	951.2	958.7
37.5°	880.2	885.8	908.2	923.2	932.5
40°	844.7	852.2	876.5	895.2	906.4
42.5°	805.5	816.7	844.7	869.0	884.0
45°	768.1	781.2	811.1	844.7	861.5
47.5°	727.0	741.9	775.6	818.5	835.4
50°	684.0	698.9	740.1	788.6	807.3
52.5°	641.0	657.8	706.4	758.7	781.2
55°	594.3	613.0	672.8	728.8	753.1
57.5°	545.7	568.1	635.4	695.2	721.4
60°	495.2	523.3	598.0	661.6	689.6
62.5°	442.9	476.5	560.6	627.9	657.8
65°	392.5	429.8	521.4	592.4	624.2
67.5°	338.3	385.0	482.2	558.8	588.7
70°	284.1	338.3	441.0	519.5	549.4
72.5°	229.9	295.3	399.9	470.9	470.9
75°	177.5	250.4	356.9	355.1	343.9
77.5°	134.6	209.3	293.4	250.4	252.3
80°	97.2	168.2	185.0	185.0	186.9
82.5°	65.4	128.9	119.6	117.7	121.5
85°	39.2	59.8	61.7	56.1	57.9
87.5°	18.7	20.6	16.8	11.2	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)