

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: P263414

Luminaire Tested: **24CZ-LD5-60-SQP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263414  
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-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3526.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 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

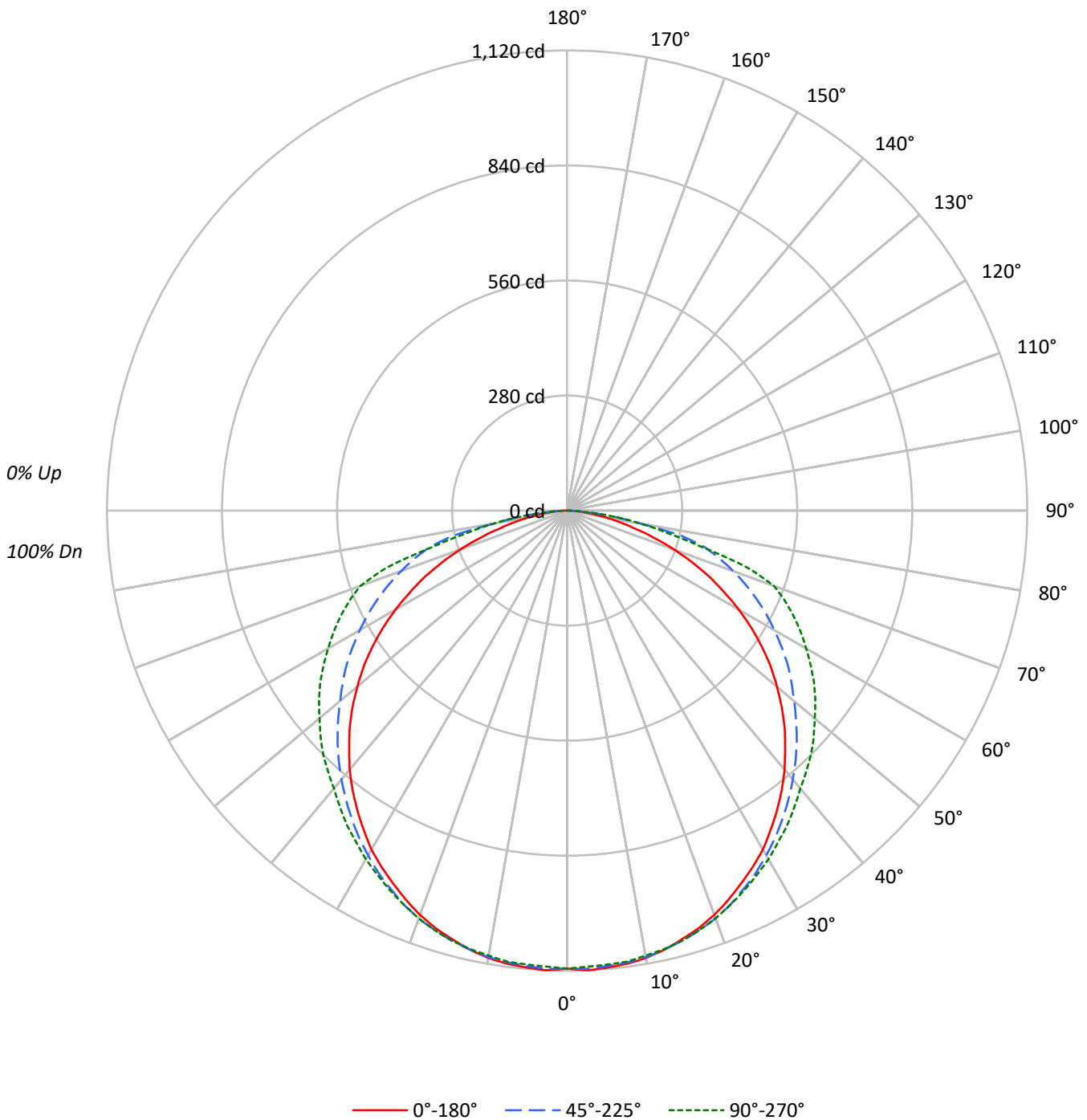
Input Watts (W): 44.826  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1500	1500	1500
5°	1508	1503	1498
10°	1510	1508	1503
15°	1504	1510	1510
20°	1499	1513	1513
25°	1487	1509	1514
30°	1480	1505	1522
35°	1463	1502	1535
40°	1446	1500	1551
45°	1424	1504	1598
50°	1395	1510	1647
55°	1359	1538	1722
60°	1299	1568	1809
65°	1218	1618	1937
70°	1089	1691	2107
75°	899	1809	1742
80°	734	1397	1411
85°	590	928	872



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	3.0
10°-20°	305.5	8.7
20°-30°	466.9	13.2
30°-40°	571.0	16.2
40°-50°	611.0	17.3
50°-60°	585.0	16.6
60°-70°	494.9	14.0
70°-80°	313.7	8.9
80°-90°	72.2	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°	878.2	24.9
0°-40°	1449.2	41.1
0°-60°	2645.2	75.0
0°-90°	3526.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3526.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1116	1111	1113	1111	1109	106
15°	1080	1078	1084	1084	1084	305
25°	1002	1002	1016	1020	1020	462
35°	891	896	914	927	934	557
45°	749	761	790	823	840	577
55°	579	597	656	710	734	517
65°	382	419	508	577	608	377
75°	173	244	348	346	335	188
85°	38	58	60	55	56	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1114.6	1114.6	1114.6	1114.6	1114.6
2.5°	1120.1	1114.6	1116.5	1114.6	1111.0
5°	1116.5	1111.0	1112.8	1111.0	1109.2
7.5°	1112.8	1107.3	1109.2	1107.3	1107.3
10°	1105.5	1100.1	1103.7	1101.9	1100.1
12.5°	1094.6	1091.0	1094.6	1092.8	1092.8
15°	1080.0	1078.2	1083.7	1083.7	1083.7
17.5°	1065.5	1063.6	1070.9	1070.9	1070.9
20°	1047.2	1045.4	1056.4	1056.4	1056.4
22.5°	1025.4	1023.6	1038.1	1038.1	1038.1
25°	1001.7	1001.7	1016.3	1019.9	1019.9
27.5°	978.0	978.0	994.4	999.9	999.9
30°	952.5	952.5	968.9	976.2	979.9
32.5°	921.6	925.2	943.4	952.5	956.2
35°	890.6	896.1	914.3	927.0	934.3
37.5°	857.8	863.3	885.2	899.7	908.8
40°	823.2	830.5	854.2	872.4	883.3
42.5°	785.0	795.9	823.2	846.9	861.5
45°	748.6	761.3	790.4	823.2	839.6
47.5°	708.5	723.1	755.8	797.7	814.1
50°	666.6	681.2	721.2	768.6	786.8
52.5°	624.7	641.1	688.5	739.4	761.3
55°	579.2	597.4	655.7	710.3	734.0
57.5°	531.8	553.7	619.2	677.5	703.0
60°	482.6	510.0	582.8	644.7	672.1
62.5°	431.6	464.4	546.4	612.0	641.1
65°	382.5	418.9	508.1	577.4	608.3
67.5°	329.7	375.2	469.9	544.6	573.7
70°	276.8	329.7	429.8	506.3	535.5
72.5°	224.0	287.8	389.8	459.0	459.0
75°	173.0	244.1	347.9	346.0	335.1
77.5°	131.1	204.0	285.9	244.1	245.9
80°	94.7	163.9	180.3	180.3	182.1
82.5°	63.7	125.7	116.6	114.7	118.4
85°	38.2	58.3	60.1	54.6	56.5
87.5°	18.2	20.0	16.4	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)