

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: P263765

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263765  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-RDP-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3276.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

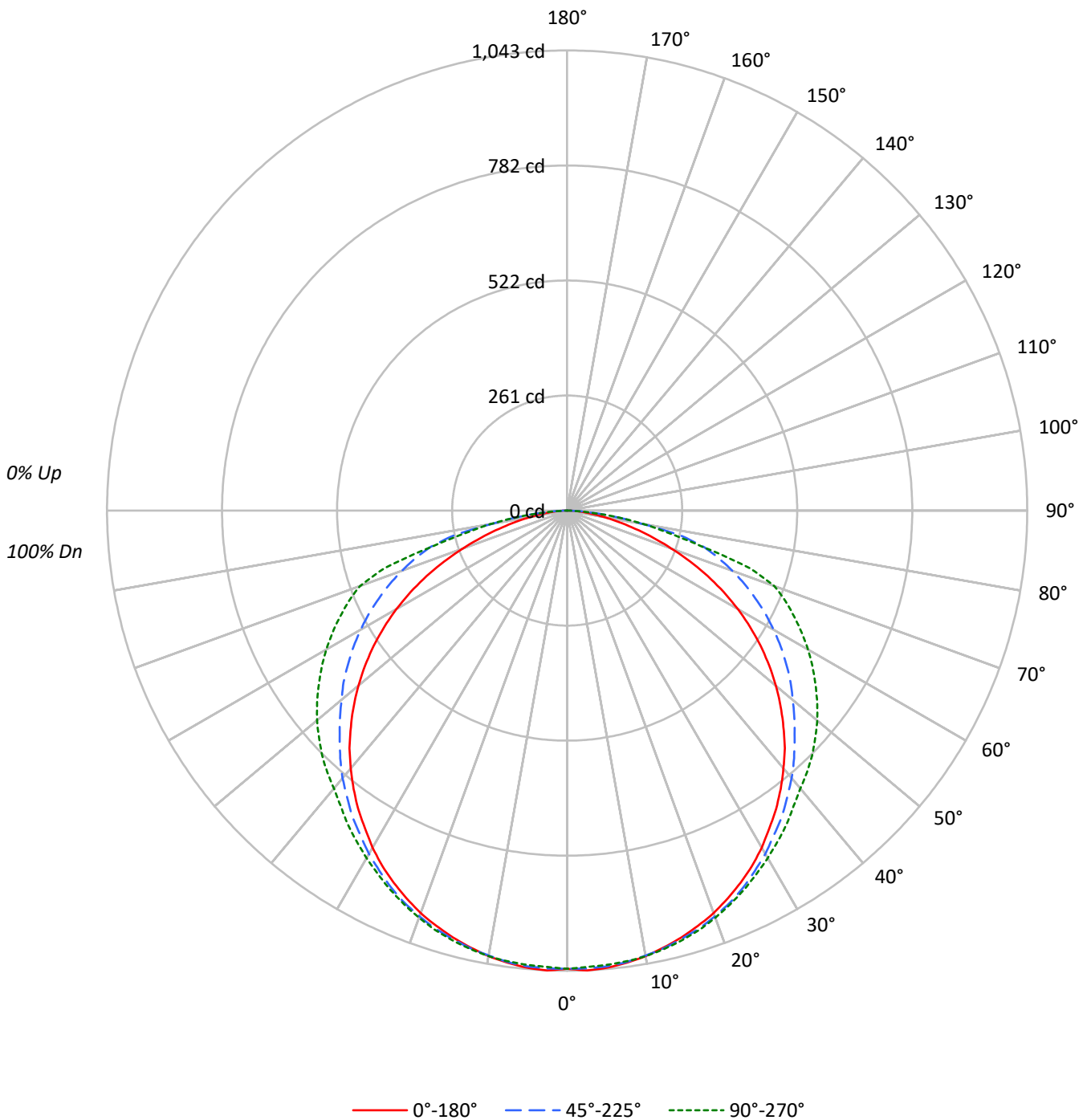
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	62	58	56
4	81	68	59	52	78	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	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	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°	1397	1397	1397
5°	1405	1400	1396
10°	1401	1399	1401
15°	1395	1399	1404
20°	1390	1402	1406
25°	1381	1401	1408
30°	1370	1395	1413
35°	1356	1393	1425
40°	1340	1391	1444
45°	1319	1387	1494
50°	1293	1397	1549
55°	1256	1422	1612
60°	1202	1454	1697
65°	1119	1499	1807
70°	990	1567	1967
75°	830	1677	1652
80°	662	1324	1375
85°	523	897	821



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	3.0
10°-20°	283.5	8.7
20°-30°	433.0	13.2
30°-40°	529.4	16.2
40°-50°	566.6	17.3
50°-60°	543.5	16.6
60°-70°	458.9	14.0
70°-80°	293.3	9.0
80°-90°	69.4	2.1
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°	815.0	24.9
0°-40°	1344.3	41.0
0°-60°	2454.5	74.9
0°-90°	3276.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3276.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1040	1034	1037	1035	1034	99
15°	1001	998	1005	1008	1008	283
25°	930	929	943	947	948	429
35°	826	832	848	860	868	516
45°	693	705	729	763	785	535
55°	535	553	606	661	687	478
65°	352	385	471	537	568	347
75°	160	227	322	329	318	172
85°	34	56	58	56	53	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1038.5	1038.5	1038.5	1038.5	1038.5
2.5°	1043.4	1036.9	1038.5	1038.5	1035.3
5°	1040.1	1033.7	1036.9	1035.3	1033.7
7.5°	1033.7	1028.8	1032.1	1032.1	1030.5
10°	1025.6	1020.8	1024.0	1025.6	1025.6
12.5°	1014.3	1011.1	1015.9	1015.9	1017.6
15°	1001.4	998.2	1004.7	1007.9	1007.9
17.5°	986.9	985.3	993.4	995.0	996.6
20°	970.8	969.2	978.9	978.9	982.1
22.5°	951.4	949.8	962.7	962.7	966.0
25°	930.5	928.9	943.4	946.6	948.2
27.5°	907.9	906.3	920.8	925.6	928.9
30°	882.1	882.1	898.2	904.7	909.5
32.5°	853.1	857.9	872.4	882.1	888.5
35°	825.7	832.1	848.2	859.5	867.6
37.5°	795.0	801.5	819.2	833.7	843.4
40°	762.8	770.8	791.8	807.9	822.4
42.5°	730.5	738.6	761.2	785.3	804.7
45°	693.4	704.7	728.9	762.8	785.3
47.5°	656.3	667.6	698.3	740.2	762.8
50°	617.6	630.5	667.6	716.0	740.2
52.5°	577.3	591.8	638.6	690.2	714.4
55°	535.4	553.1	606.3	661.2	687.0
57.5°	491.8	511.2	574.1	632.1	659.6
60°	446.7	470.9	540.2	601.5	630.5
62.5°	399.9	429.0	506.4	569.3	599.9
65°	351.5	385.4	470.9	537.0	567.6
67.5°	301.6	346.7	435.4	504.7	535.4
70°	251.6	304.8	398.3	469.3	499.9
72.5°	204.8	266.1	361.2	427.3	433.8
75°	159.6	227.4	322.5	329.0	317.7
77.5°	119.3	188.7	266.1	237.1	235.4
80°	85.5	151.6	170.9	175.8	177.4
82.5°	56.4	114.5	111.3	114.5	112.9
85°	33.9	56.4	58.1	56.4	53.2
87.5°	16.1	21.0	16.1	14.5	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)