

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: P263509

Luminaire Tested: **24CZ-LD5-45-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263509  
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-LD5-45-RDP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3273.0 lumens  
Efficiency: N/A  
Efficacy: 101.8 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

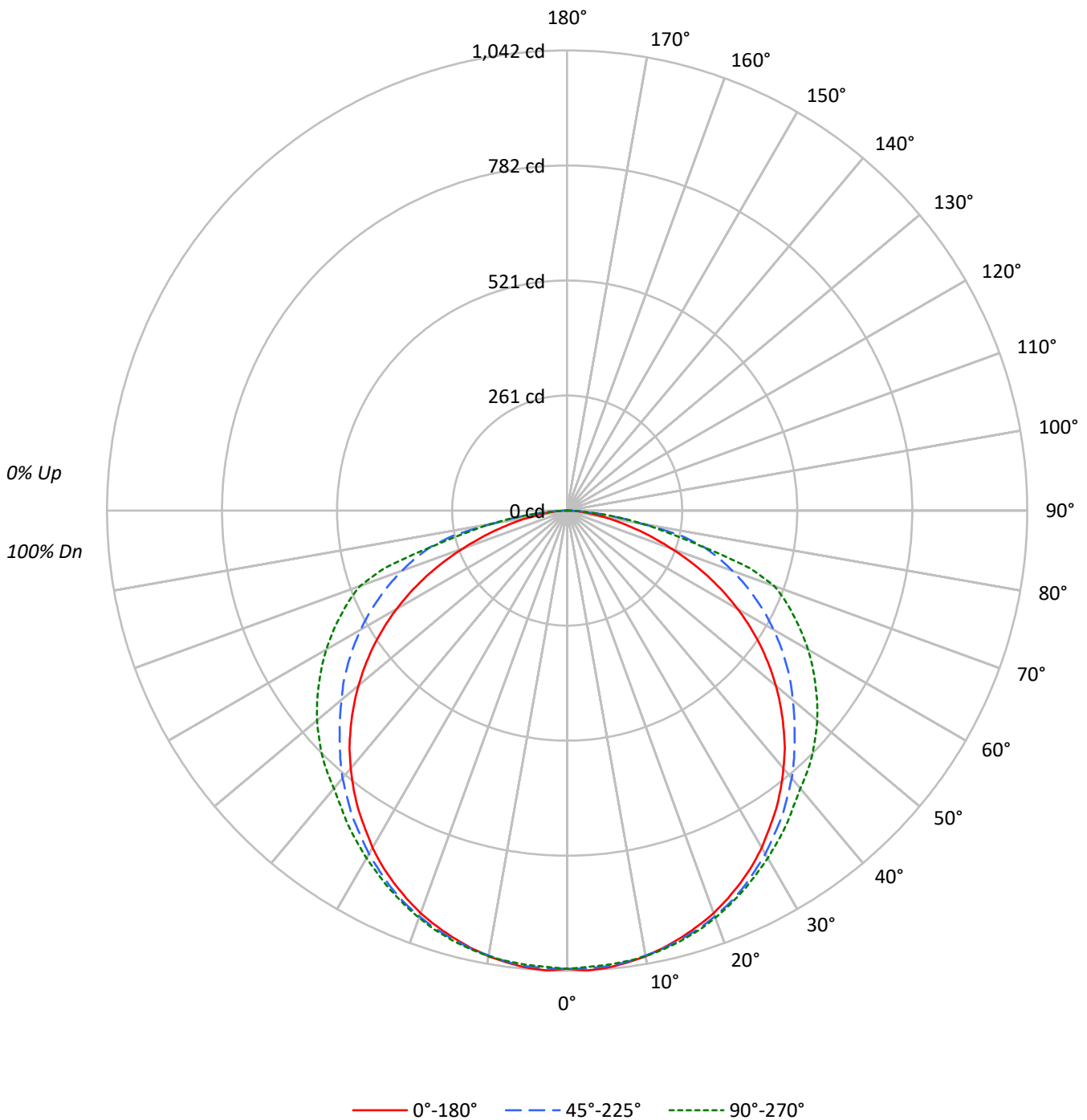
Input Watts (W): 32.156982  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1396	1396	1396
5°	1404	1399	1395
10°	1400	1398	1400
15°	1394	1398	1403
20°	1389	1400	1405
25°	1380	1399	1406
30°	1369	1394	1412
35°	1355	1392	1424
40°	1339	1389	1443
45°	1318	1386	1493
50°	1292	1396	1548
55°	1255	1421	1610
60°	1201	1452	1695
65°	1118	1498	1805
70°	989	1565	1965
75°	829	1675	1650
80°	662	1323	1373
85°	522	895	821



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.4	3.0
10°-20°	283.2	8.7
20°-30°	432.6	13.2
30°-40°	528.9	16.2
40°-50°	566.1	17.3
50°-60°	543.0	16.6
60°-70°	458.5	14.0
70°-80°	293.0	9.0
80°-90°	69.3	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°	814.2	24.9
0°-40°	1343.1	41.0
0°-60°	2452.2	74.9
0°-90°	3273.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3273.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1039	1033	1036	1034	1033	99
15°	1000	997	1004	1007	1007	282
25°	930	928	942	946	947	428
35°	825	831	848	859	867	516
45°	693	704	728	762	785	534
55°	535	553	606	661	686	477
65°	351	385	470	536	567	346
75°	160	227	322	329	317	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°	1037.6	1037.6	1037.6	1037.6	1037.6
2.5°	1042.4	1036.0	1037.6	1037.6	1034.3
5°	1039.2	1032.7	1036.0	1034.3	1032.7
7.5°	1032.7	1027.9	1031.1	1031.1	1029.5
10°	1024.7	1019.8	1023.1	1024.7	1024.7
12.5°	1013.4	1010.2	1015.0	1015.0	1016.6
15°	1000.5	997.3	1003.7	1007.0	1007.0
17.5°	986.0	984.4	992.5	994.1	995.7
20°	969.9	968.3	978.0	978.0	981.2
22.5°	950.6	949.0	961.8	961.8	965.1
25°	929.6	928.0	942.5	945.7	947.3
27.5°	907.1	905.5	920.0	924.8	928.0
30°	881.3	881.3	897.4	903.8	908.7
32.5°	852.3	857.1	871.6	881.3	887.7
35°	824.9	831.3	847.5	858.7	866.8
37.5°	794.3	800.7	818.5	833.0	842.6
40°	762.1	770.1	791.1	807.2	821.7
42.5°	729.8	737.9	760.5	784.6	804.0
45°	692.8	704.1	728.2	762.1	784.6
47.5°	655.7	667.0	697.6	739.5	762.1
50°	617.1	630.0	667.0	715.3	739.5
52.5°	576.8	591.3	638.0	689.6	713.7
55°	534.9	552.6	605.8	660.6	686.3
57.5°	491.4	510.7	573.6	631.6	659.0
60°	446.3	470.5	539.7	601.0	630.0
62.5°	399.6	428.6	505.9	568.7	599.3
65°	351.2	385.1	470.5	536.5	567.1
67.5°	301.3	346.4	435.0	504.3	534.9
70°	251.3	304.5	397.9	468.8	499.5
72.5°	204.6	265.8	360.9	426.9	433.4
75°	159.5	227.2	322.2	328.7	317.4
77.5°	119.2	188.5	265.8	236.8	235.2
80°	85.4	151.4	170.8	175.6	177.2
82.5°	56.4	114.4	111.2	114.4	112.8
85°	33.8	56.4	58.0	56.4	53.2
87.5°	16.1	20.9	16.1	14.5	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)