

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: P263589

Luminaire Tested: **24CZ-LD5-50-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263589  
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-LD5-50-RDP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3206.6 lumens  
Efficiency: N/A  
Efficacy: 87.5 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

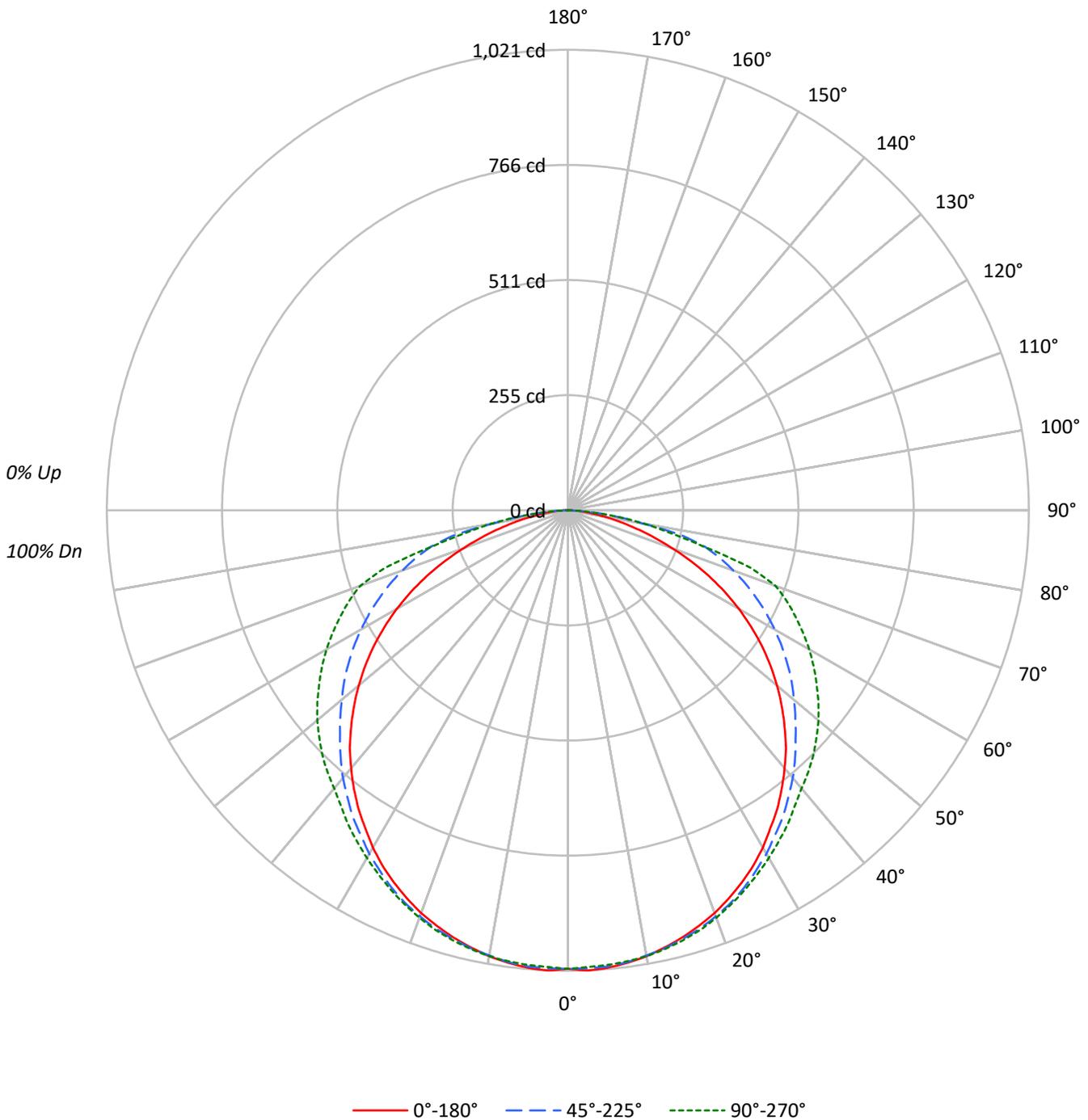
Input Watts (W): 36.640512  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1368	1368	1368
5°	1375	1371	1367
10°	1372	1369	1372
15°	1365	1370	1374
20°	1361	1372	1376
25°	1352	1371	1378
30°	1341	1366	1383
35°	1328	1364	1395
40°	1311	1361	1414
45°	1291	1358	1463
50°	1266	1368	1517
55°	1229	1392	1577
60°	1176	1423	1661
65°	1096	1467	1769
70°	969	1534	1925
75°	813	1641	1617
80°	649	1296	1345
85°	511	877	804



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.4	3.0
10°-20°	277.5	8.7
20°-30°	423.8	13.2
30°-40°	518.2	16.2
40°-50°	554.6	17.3
50°-60°	532.0	16.6
60°-70°	449.2	14.0
70°-80°	287.1	9.0
80°-90°	67.9	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°	797.7	24.9
0°-40°	1315.9	41.0
0°-60°	2402.5	74.9
0°-90°	3206.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3206.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1018	1012	1015	1013	1012	97
15°	980	977	983	986	986	277
25°	911	909	923	927	928	420
35°	808	814	830	841	849	505
45°	679	690	714	747	769	524
55°	524	541	594	647	672	468
65°	344	377	461	526	556	339
75°	156	223	316	322	311	168
85°	33	55	57	55	52	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1016.5	1016.5	1016.5	1016.5	1016.5
2.5°	1021.3	1015.0	1016.5	1016.5	1013.4
5°	1018.1	1011.8	1015.0	1013.4	1011.8
7.5°	1011.8	1007.1	1010.2	1010.2	1008.6
10°	1003.9	999.2	1002.3	1003.9	1003.9
12.5°	992.9	989.7	994.4	994.4	996.0
15°	980.2	977.1	983.4	986.5	986.5
17.5°	966.0	964.4	972.3	973.9	975.5
20°	950.2	948.7	958.1	958.1	961.3
22.5°	931.3	929.7	942.3	942.3	945.5
25°	910.8	909.2	923.4	926.6	928.1
27.5°	888.7	887.1	901.3	906.0	909.2
30°	863.4	863.4	879.2	885.5	890.3
32.5°	835.0	839.7	853.9	863.4	869.7
35°	808.2	814.5	830.3	841.3	849.2
37.5°	778.2	784.5	801.9	816.1	825.5
40°	746.6	754.5	775.0	790.8	805.0
42.5°	715.0	722.9	745.0	768.7	787.7
45°	678.7	689.8	713.5	746.6	768.7
47.5°	642.4	653.5	683.5	724.5	746.6
50°	604.6	617.2	653.5	700.8	724.5
52.5°	565.1	579.3	625.1	675.6	699.3
55°	524.1	541.4	593.5	647.2	672.4
57.5°	481.4	500.4	561.9	618.8	645.6
60°	437.2	460.9	528.8	588.8	617.2
62.5°	391.5	419.9	495.6	557.2	587.2
65°	344.1	377.3	460.9	525.6	555.6
67.5°	295.2	339.4	426.2	494.1	524.1
70°	246.2	298.3	389.9	459.3	489.3
72.5°	200.5	260.4	353.6	418.3	424.6
75°	156.3	222.6	315.7	322.0	311.0
77.5°	116.8	184.7	260.4	232.0	230.5
80°	83.7	148.4	167.3	172.1	173.6
82.5°	55.2	112.1	108.9	112.1	110.5
85°	33.1	55.2	56.8	55.2	52.1
87.5°	15.8	20.5	15.8	14.2	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)