

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: P230481

Luminaire Tested: **24CZ-LD5-55-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230481  
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-LD5-55-RDP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (168) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3120.7 lumens  
Efficiency: N/A  
Efficacy: 68.1 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

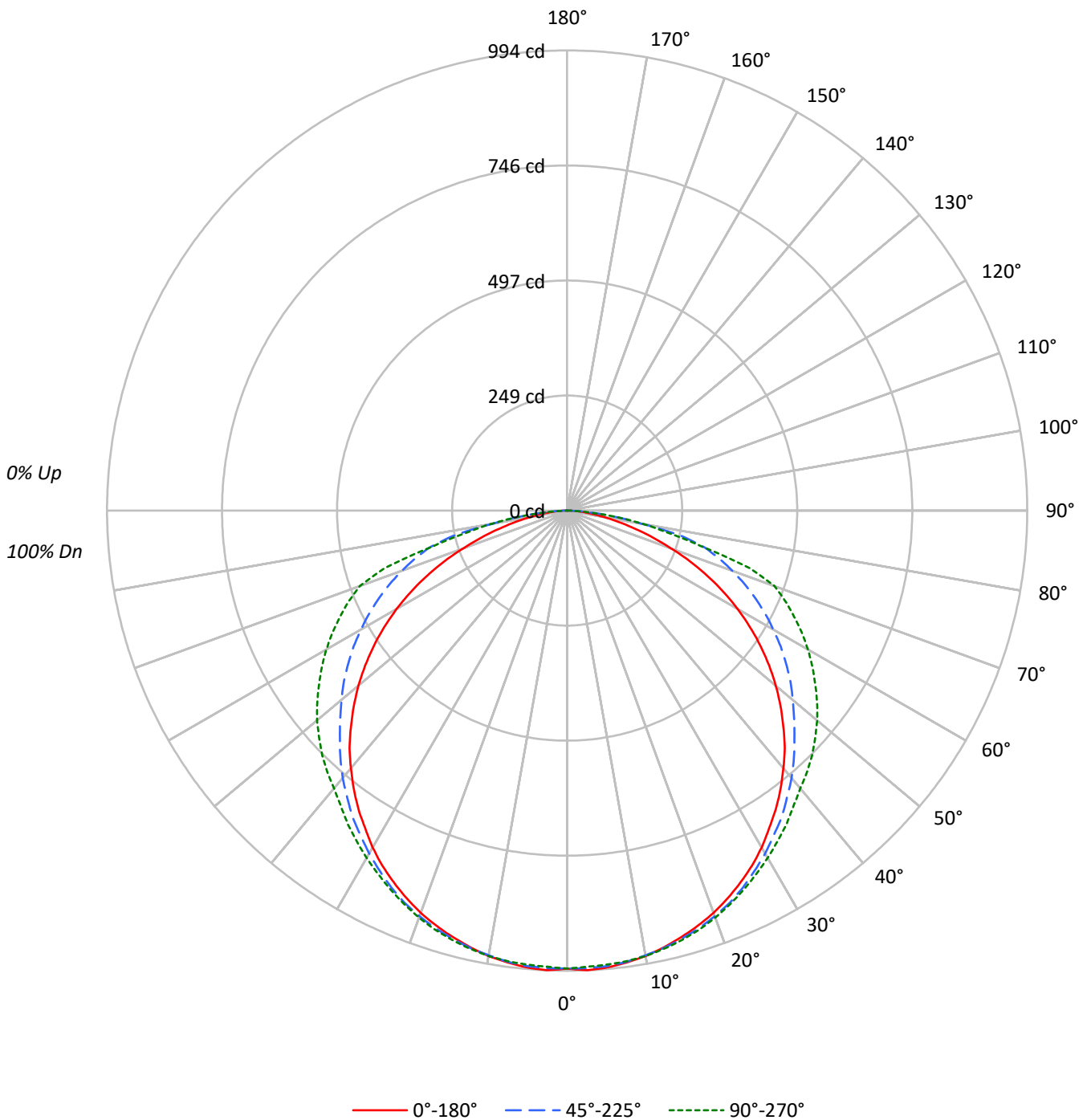
Input Watts (W): 45.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	61	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°	1331	1331	1331
5°	1338	1334	1330
10°	1335	1333	1335
15°	1329	1333	1337
20°	1324	1335	1339
25°	1316	1334	1341
30°	1306	1329	1346
35°	1292	1327	1357
40°	1276	1325	1376
45°	1257	1321	1423
50°	1231	1331	1476
55°	1196	1355	1535
60°	1145	1385	1616
65°	1066	1428	1721
70°	943	1493	1873
75°	791	1597	1573
80°	631	1261	1309
85°	499	854	783



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.8	3.0
10°-20°	270.0	8.7
20°-30°	412.5	13.2
30°-40°	504.3	16.2
40°-50°	539.7	17.3
50°-60°	517.7	16.6
60°-70°	437.1	14.0
70°-80°	279.4	9.0
80°-90°	66.1	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°	776.3	24.9
0°-40°	1280.6	41.0
0°-60°	2338.1	74.9
0°-90°	3120.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3120.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	991	985	988	986	985	94
15°	954	951	957	960	960	269
25°	886	885	899	902	903	408
35°	786	793	808	819	826	492
45°	660	671	694	727	748	509
55°	510	527	578	630	654	455
65°	335	367	448	512	541	330
75°	152	217	307	313	303	164
85°	32	54	55	54	51	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	989.3	989.3	989.3	989.3	989.3
2.5°	993.9	987.7	989.3	989.3	986.2
5°	990.8	984.7	987.7	986.2	984.7
7.5°	984.7	980.0	983.1	983.1	981.6
10°	977.0	972.4	975.4	977.0	977.0
12.5°	966.2	963.2	967.8	967.8	969.3
15°	953.9	950.9	957.0	960.1	960.1
17.5°	940.1	938.6	946.3	947.8	949.3
20°	924.7	923.2	932.4	932.4	935.5
22.5°	906.3	904.8	917.1	917.1	920.1
25°	886.3	884.8	898.6	901.7	903.2
27.5°	864.8	863.3	877.1	881.7	884.8
30°	840.3	840.3	855.6	861.8	866.4
32.5°	812.6	817.2	831.0	840.3	846.4
35°	786.5	792.6	808.0	818.8	826.4
37.5°	757.3	763.5	780.4	794.2	803.4
40°	726.6	734.3	754.2	769.6	783.4
42.5°	695.9	703.5	725.1	748.1	766.5
45°	660.5	671.3	694.3	726.6	748.1
47.5°	625.2	636.0	665.1	705.1	726.6
50°	588.3	600.6	636.0	682.0	705.1
52.5°	549.9	563.8	608.3	657.5	680.5
55°	510.0	526.9	577.6	629.8	654.4
57.5°	468.5	487.0	546.9	602.2	628.3
60°	425.5	448.5	514.6	573.0	600.6
62.5°	381.0	408.6	482.3	542.3	571.4
65°	334.9	367.1	448.5	511.5	540.7
67.5°	287.3	330.3	414.8	480.8	510.0
70°	239.6	290.3	379.4	447.0	476.2
72.5°	195.1	253.5	344.1	407.1	413.2
75°	152.1	216.6	307.2	313.4	302.6
77.5°	113.7	179.7	253.5	225.8	224.3
80°	81.4	144.4	162.8	167.4	169.0
82.5°	53.8	109.1	106.0	109.1	107.5
85°	32.3	53.8	55.3	53.8	50.7
87.5°	15.4	20.0	15.4	13.8	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)