

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: P230411

Luminaire Tested: **24CZ-LD5-55-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230411  
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-LD5-55-SQP-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3649.5 lumens  
Efficiency: N/A  
Efficacy: 79.7 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

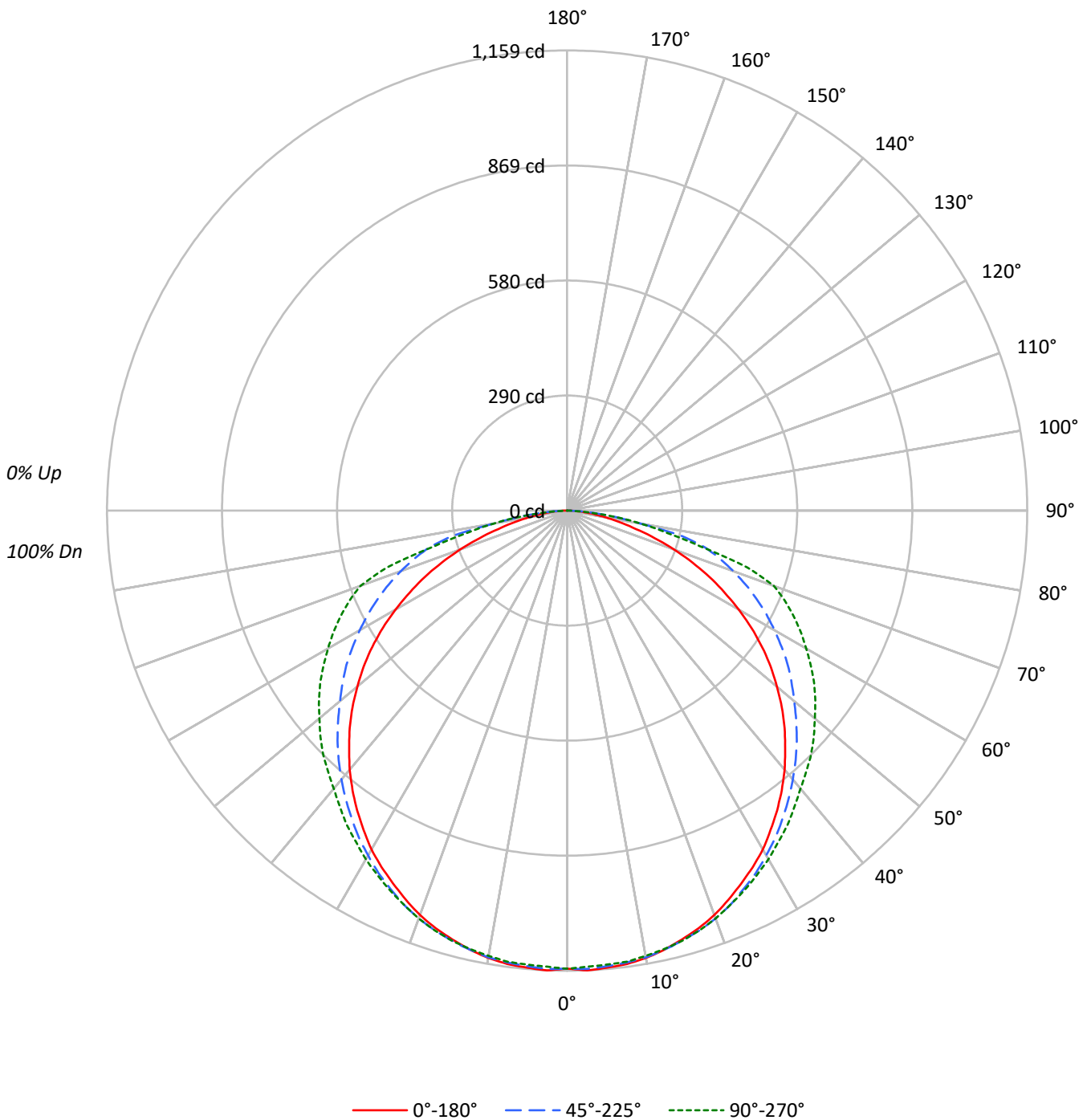
Input Watts (W): 45.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1552	1552	1552
5°	1561	1556	1551
10°	1563	1561	1556
15°	1557	1562	1562
20°	1552	1566	1566
25°	1539	1562	1567
30°	1532	1558	1576
35°	1514	1554	1588
40°	1497	1553	1606
45°	1474	1557	1654
50°	1444	1563	1705
55°	1406	1592	1782
60°	1344	1623	1872
65°	1260	1674	2004
70°	1127	1750	2180
75°	931	1872	1803
80°	759	1446	1461
85°	611	960	902



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.6	3.0
10°-20°	316.2	8.7
20°-30°	483.2	13.2
30°-40°	591.0	16.2
40°-50°	632.4	17.3
50°-60°	605.5	16.6
60°-70°	512.2	14.0
70°-80°	324.7	8.9
80°-90°	74.7	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°	909.0	24.9
0°-40°	1500.0	41.1
0°-60°	2737.9	75.0
0°-90°	3649.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3649.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1156	1150	1152	1150	1148	110
15°	1118	1116	1122	1122	1122	316
25°	1037	1037	1052	1056	1056	478
35°	922	928	946	960	967	577
45°	775	788	818	852	869	597
55°	600	618	679	735	760	535
65°	396	434	526	598	630	390
75°	179	253	360	358	347	195
85°	40	60	62	57	58	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1153.7	1153.7	1153.7	1153.7	1153.7
2.5°	1159.3	1153.7	1155.6	1153.7	1149.9
5°	1155.6	1149.9	1151.8	1149.9	1148.0
7.5°	1151.8	1146.1	1148.0	1146.1	1146.1
10°	1144.2	1138.6	1142.4	1140.5	1138.6
12.5°	1132.9	1129.2	1132.9	1131.1	1131.1
15°	1117.9	1116.0	1121.6	1121.6	1121.6
17.5°	1102.8	1100.9	1108.4	1108.4	1108.4
20°	1083.9	1082.0	1093.4	1093.4	1093.4
22.5°	1061.3	1059.4	1074.5	1074.5	1074.5
25°	1036.8	1036.8	1051.9	1055.6	1055.6
27.5°	1012.3	1012.3	1029.3	1034.9	1034.9
30°	985.9	985.9	1002.9	1010.4	1014.2
32.5°	953.9	957.6	976.5	985.9	989.7
35°	921.8	927.5	946.3	959.5	967.1
37.5°	887.9	893.5	916.2	931.2	940.7
40°	852.1	859.6	884.1	903.0	914.3
42.5°	812.5	823.8	852.1	876.6	891.6
45°	774.8	788.0	818.1	852.1	869.0
47.5°	733.3	748.4	782.3	825.7	842.6
50°	689.9	705.0	746.5	795.5	814.4
52.5°	646.6	663.6	712.6	765.3	788.0
55°	599.5	618.3	678.6	735.2	759.7
57.5°	550.4	573.1	640.9	701.3	727.6
60°	499.5	527.8	603.2	667.3	695.6
62.5°	446.8	480.7	565.5	633.4	663.6
65°	395.9	433.6	525.9	597.6	629.6
67.5°	341.2	388.3	486.4	563.6	593.8
70°	286.5	341.2	444.9	524.1	554.2
72.5°	231.9	297.8	403.4	475.0	475.0
75°	179.1	252.6	360.1	358.2	346.9
77.5°	135.7	211.1	296.0	252.6	254.5
80°	98.0	169.7	186.6	186.6	188.5
82.5°	66.0	130.1	120.6	118.8	122.5
85°	39.6	60.3	62.2	56.6	58.4
87.5°	18.9	20.7	17.0	11.3	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)