

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: P230491

Luminaire Tested: **24CZ-LD5-65-RDP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230491  
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-LD5-65-RDP-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4158.4 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

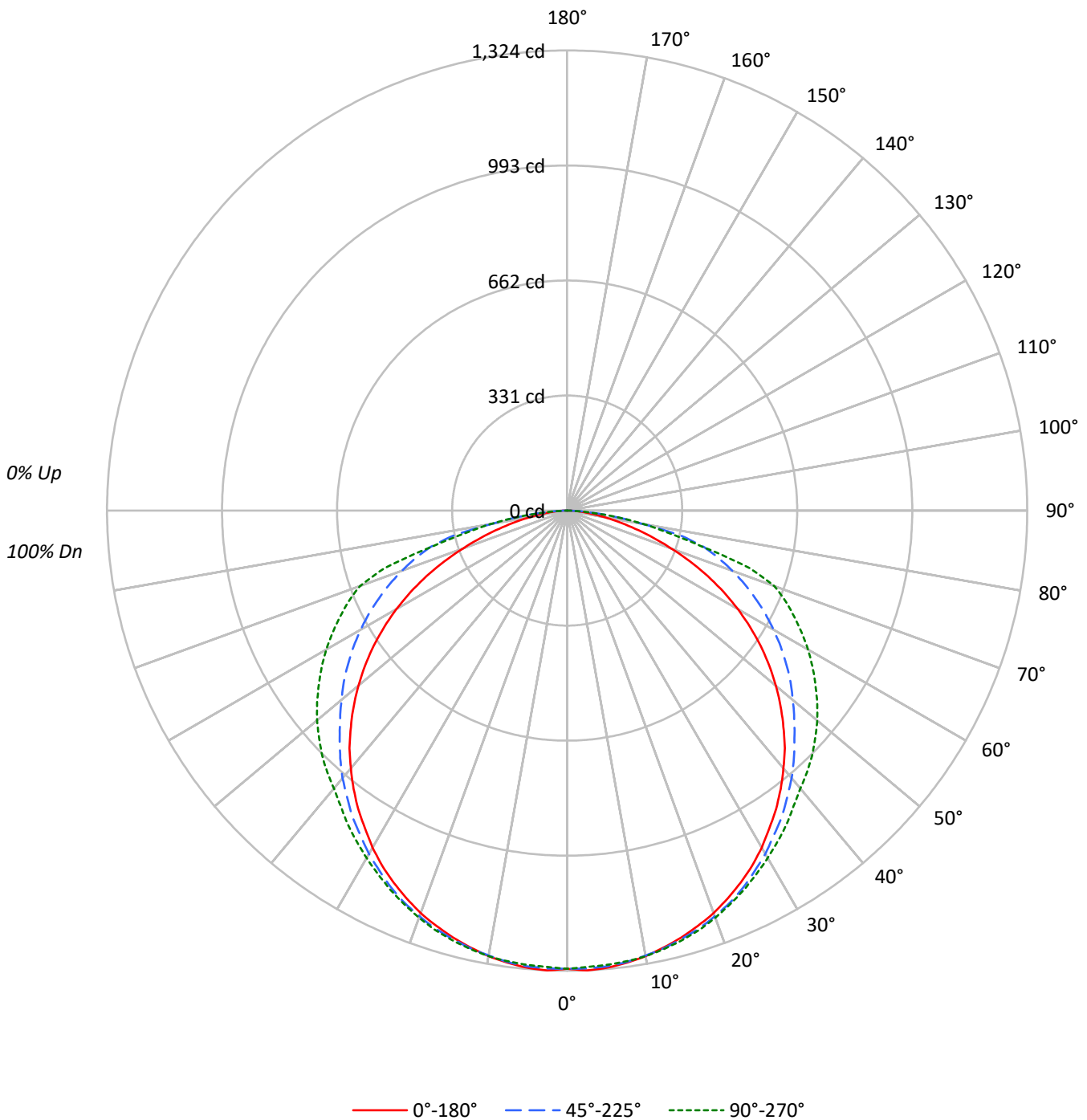
Input Watts (W): 57.64  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1774	1774	1774
5°	1783	1778	1772
10°	1779	1776	1779
15°	1771	1776	1782
20°	1764	1779	1785
25°	1753	1778	1787
30°	1740	1771	1794
35°	1722	1769	1809
40°	1701	1765	1834
45°	1675	1760	1897
50°	1641	1774	1967
55°	1594	1806	2046
60°	1526	1845	2154
65°	1421	1903	2294
70°	1256	1989	2496
75°	1054	2128	2097
80°	841	1681	1745
85°	664	1138	1044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	3.0
10°-20°	359.8	8.7
20°-30°	549.6	13.2
30°-40°	672.0	16.2
40°-50°	719.3	17.3
50°-60°	689.9	16.6
60°-70°	582.5	14.0
70°-80°	372.3	9.0
80°-90°	88.0	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°	1034.5	24.9
0°-40°	1706.5	41.0
0°-60°	3115.6	74.9
0°-90°	4158.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4158.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1318	1318	1318	1318	1318	
5°	1320	1312	1316	1314	1312	125
15°	1271	1267	1275	1279	1279	359
25°	1181	1179	1198	1202	1204	544
35°	1048	1056	1077	1091	1101	655
45°	880	894	925	968	997	679
55°	680	702	770	839	872	606
65°	446	489	598	682	720	440
75°	203	289	409	418	403	218
85°	43	72	74	72	68	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1318.3	1318.3	1318.3	1318.3	1318.3
2.5°	1324.4	1316.2	1318.3	1318.3	1314.2
5°	1320.3	1312.1	1316.2	1314.2	1312.1
7.5°	1312.1	1306.0	1310.1	1310.1	1308.0
10°	1301.9	1295.7	1299.8	1301.9	1301.9
12.5°	1287.6	1283.5	1289.6	1289.6	1291.6
15°	1271.2	1267.1	1275.3	1279.4	1279.4
17.5°	1252.8	1250.7	1260.9	1263.0	1265.0
20°	1232.3	1230.2	1242.5	1242.5	1246.6
22.5°	1207.7	1205.7	1222.0	1222.0	1226.1
25°	1181.1	1179.1	1197.5	1201.6	1203.6
27.5°	1152.5	1150.4	1168.8	1175.0	1179.1
30°	1119.7	1119.7	1140.2	1148.4	1154.5
32.5°	1082.9	1089.0	1107.4	1119.7	1127.9
35°	1048.1	1056.2	1076.7	1091.0	1101.3
37.5°	1009.2	1017.3	1039.9	1058.3	1070.6
40°	968.2	978.5	1005.1	1025.5	1044.0
42.5°	927.3	937.5	966.2	996.9	1021.4
45°	880.2	894.5	925.2	968.2	996.9
47.5°	833.1	847.5	886.3	939.6	968.2
50°	784.0	800.4	847.5	908.9	939.6
52.5°	732.8	751.2	810.6	876.1	906.8
55°	679.6	702.1	769.7	839.3	872.0
57.5°	624.3	648.9	728.7	802.4	837.2
60°	567.0	597.7	685.7	763.5	800.4
62.5°	507.7	544.5	642.8	722.6	761.5
65°	446.2	489.2	597.7	681.6	720.5
67.5°	382.8	440.1	552.7	640.7	679.6
70°	319.3	386.9	505.6	595.7	634.6
72.5°	260.0	337.8	458.5	542.5	550.6
75°	202.7	288.6	409.4	417.6	403.3
77.5°	151.5	239.5	337.8	300.9	298.9
80°	108.5	192.4	217.0	223.1	225.2
82.5°	71.6	145.3	141.2	145.3	143.3
85°	43.0	71.6	73.7	71.6	67.6
87.5°	20.5	26.6	20.5	18.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)