

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: P230489

Luminaire Tested: **24CZ-LD5-65-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230489  
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-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: 3730.4 lumens  
Efficiency: N/A  
Efficacy: 64.7 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

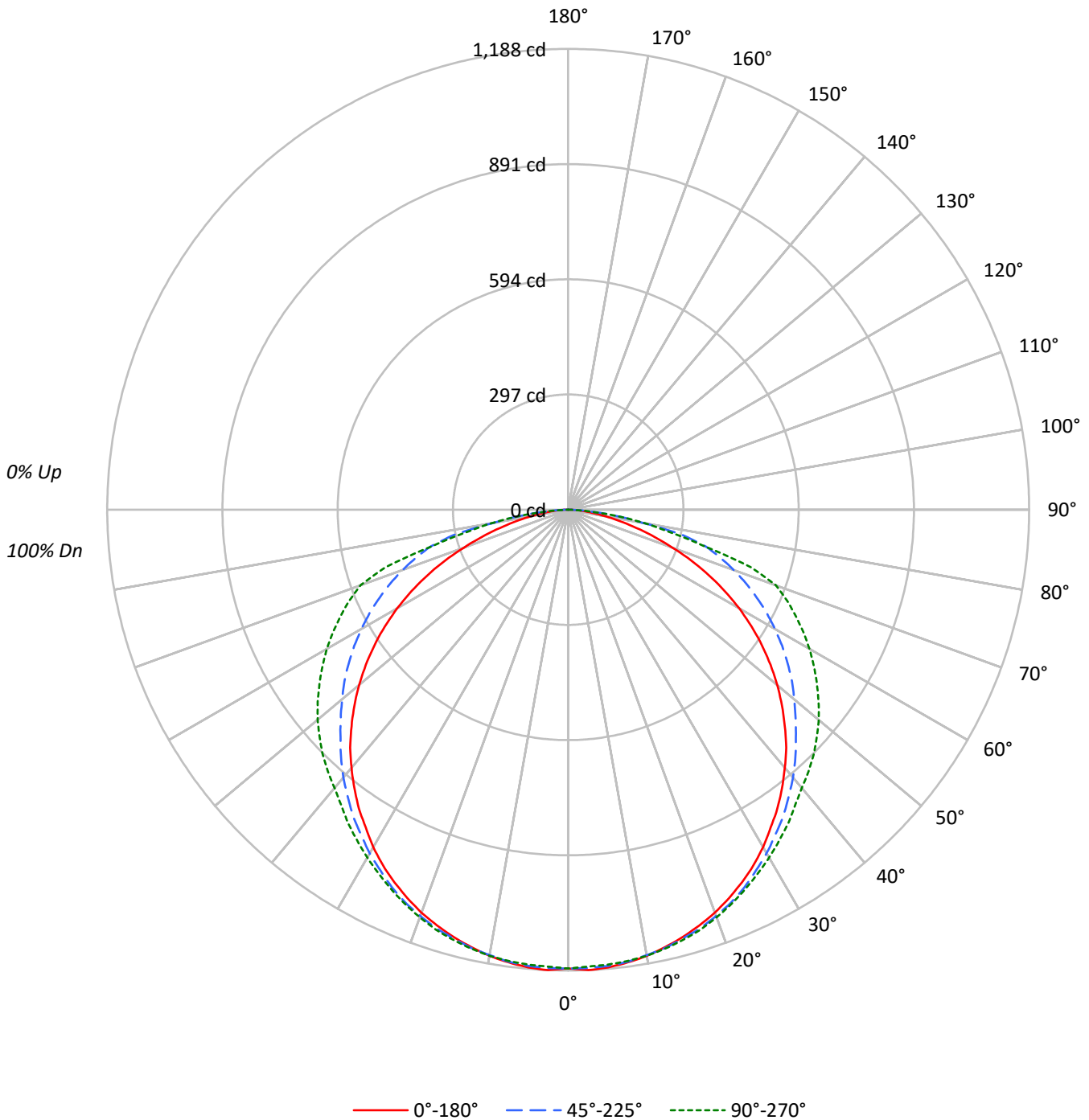
Input Watts (W): 57.64  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1591	1591	1591
5°	1600	1595	1590
10°	1596	1593	1596
15°	1588	1594	1599
20°	1583	1596	1601
25°	1573	1595	1603
30°	1560	1589	1609
35°	1544	1587	1623
40°	1526	1584	1645
45°	1502	1579	1702
50°	1472	1591	1764
55°	1430	1620	1835
60°	1369	1655	1932
65°	1274	1707	2058
70°	1127	1784	2239
75°	945	1909	1880
80°	754	1508	1565
85°	596	1020	936



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.2	3.0
10°-20°	322.8	8.7
20°-30°	493.0	13.2
30°-40°	602.8	16.2
40°-50°	645.2	17.3
50°-60°	618.9	16.6
60°-70°	522.6	14.0
70°-80°	334.0	9.0
80°-90°	79.0	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°	928.0	24.9
0°-40°	1530.8	41.0
0°-60°	2794.9	74.9
0°-90°	3730.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3730.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1184	1177	1181	1179	1177	112
15°	1140	1137	1144	1148	1148	322
25°	1060	1058	1074	1078	1080	488
35°	940	948	966	979	988	588
45°	790	802	830	869	894	609
55°	610	630	690	753	782	544
65°	400	439	536	612	646	395
75°	182	259	367	375	362	196
85°	39	64	66	64	61	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1182.6	1182.6	1182.6	1182.6	1182.6
2.5°	1188.1	1180.7	1182.6	1182.6	1178.9
5°	1184.4	1177.1	1180.7	1178.9	1177.1
7.5°	1177.1	1171.6	1175.2	1175.2	1173.4
10°	1167.9	1162.4	1166.0	1167.9	1167.9
12.5°	1155.0	1151.4	1156.9	1156.9	1158.7
15°	1140.3	1136.7	1144.0	1147.7	1147.7
17.5°	1123.8	1122.0	1131.2	1133.0	1134.8
20°	1105.4	1103.6	1114.6	1114.6	1118.3
22.5°	1083.4	1081.6	1096.3	1096.3	1099.9
25°	1059.5	1057.7	1074.2	1077.9	1079.7
27.5°	1033.8	1032.0	1048.5	1054.0	1057.7
30°	1004.4	1004.4	1022.8	1030.2	1035.7
32.5°	971.4	976.9	993.4	1004.4	1011.8
35°	940.2	947.5	965.9	978.7	987.9
37.5°	905.3	912.6	932.8	949.4	960.4
40°	868.6	877.7	901.6	920.0	936.5
42.5°	831.8	841.0	866.7	894.3	916.3
45°	789.6	802.5	830.0	868.6	894.3
47.5°	747.4	760.2	795.1	842.9	868.6
50°	703.3	718.0	760.2	815.3	842.9
52.5°	657.4	673.9	727.2	785.9	813.5
55°	609.6	629.8	690.4	752.9	782.3
57.5°	560.1	582.1	653.7	719.8	751.0
60°	508.7	536.2	615.2	684.9	718.0
62.5°	455.4	488.5	576.6	648.2	683.1
65°	400.3	438.9	536.2	611.5	646.4
67.5°	343.4	394.8	495.8	574.8	609.6
70°	286.5	347.1	453.6	534.4	569.2
72.5°	233.2	303.0	411.3	486.6	494.0
75°	181.8	258.9	367.3	374.6	361.7
77.5°	135.9	214.8	303.0	269.9	268.1
80°	97.3	172.6	194.6	200.2	202.0
82.5°	64.3	130.4	126.7	130.4	128.5
85°	38.6	64.3	66.1	64.3	60.6
87.5°	18.4	23.9	18.4	16.5	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)