

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: P230531

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230531  
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-LD5-65SE-RDP-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4132.1 lumens  
Efficiency: N/A  
Efficacy: 68.9 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

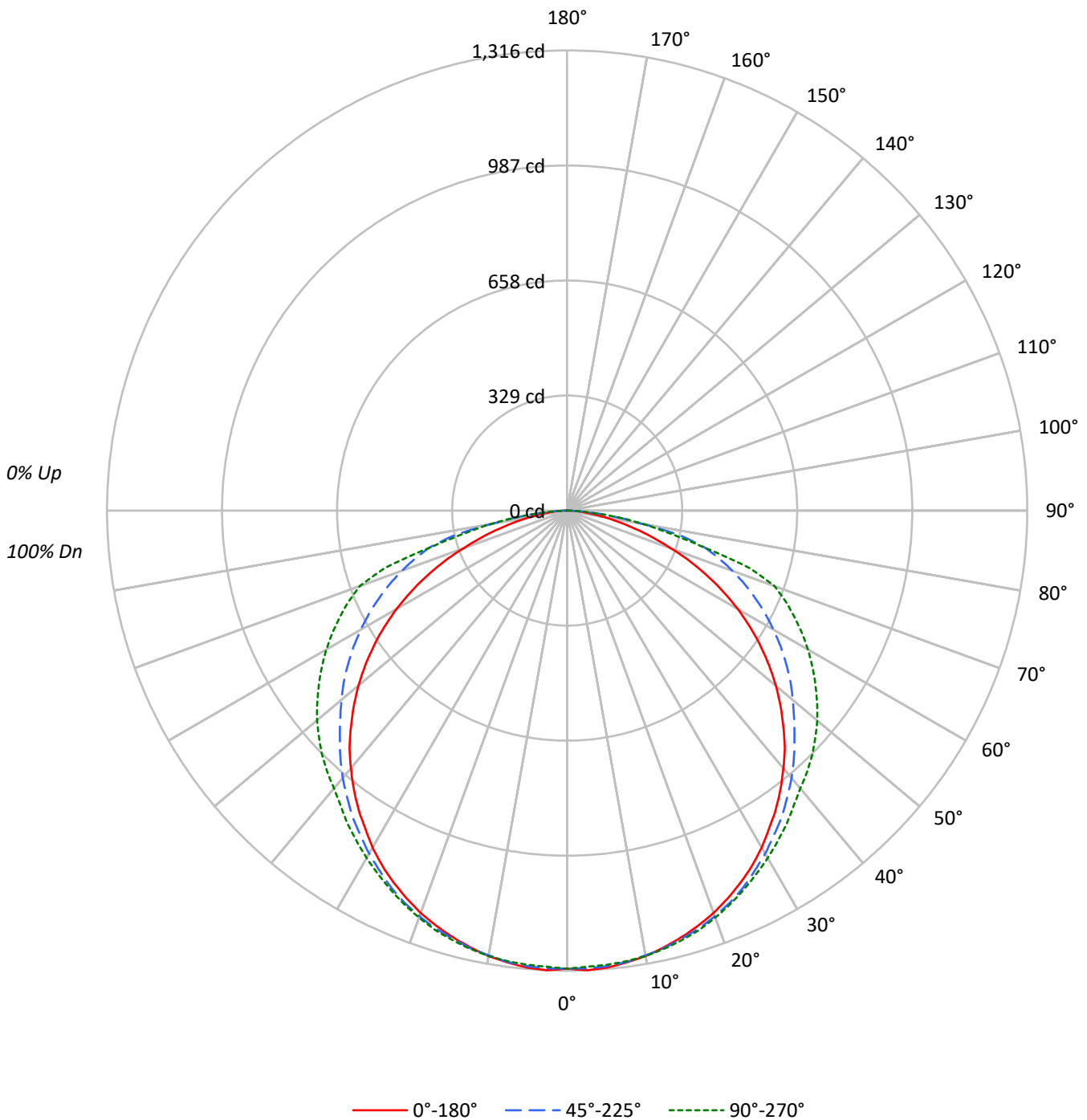
Input Watts (W): 60  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1762	1762	1762
5°	1772	1766	1761
10°	1767	1765	1767
15°	1759	1765	1771
20°	1753	1768	1774
25°	1742	1767	1776
30°	1729	1760	1782
35°	1711	1757	1797
40°	1690	1754	1822
45°	1664	1749	1885
50°	1631	1763	1954
55°	1584	1794	2033
60°	1516	1834	2140
65°	1412	1891	2280
70°	1248	1976	2480
75°	1047	2115	2083
80°	835	1671	1733
85°	659	1130	1036



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.2	3.0
10°-20°	357.6	8.7
20°-30°	546.1	13.2
30°-40°	667.7	16.2
40°-50°	714.7	17.3
50°-60°	685.5	16.6
60°-70°	578.8	14.0
70°-80°	369.9	9.0
80°-90°	87.5	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°	1027.9	24.9
0°-40°	1695.6	41.0
0°-60°	3095.9	74.9
0°-90°	4132.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4132.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1312	1304	1308	1306	1304	125
15°	1263	1259	1267	1271	1271	357
25°	1174	1172	1190	1194	1196	541
35°	1041	1050	1070	1084	1094	651
45°	875	889	919	962	991	675
55°	675	698	765	834	866	603
65°	443	486	594	677	716	437
75°	201	287	407	415	401	217
85°	43	71	73	71	67	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1309.9	1309.9	1309.9	1309.9	1309.9
2.5°	1316.0	1307.9	1309.9	1309.9	1305.8
5°	1311.9	1303.8	1307.9	1305.8	1303.8
7.5°	1303.8	1297.7	1301.8	1301.8	1299.7
10°	1293.6	1287.5	1291.6	1293.6	1293.6
12.5°	1279.4	1275.3	1281.4	1281.4	1283.5
15°	1263.1	1259.1	1267.2	1271.3	1271.3
17.5°	1244.8	1242.8	1253.0	1255.0	1257.0
20°	1224.5	1222.4	1234.6	1234.6	1238.7
22.5°	1200.1	1198.0	1214.3	1214.3	1218.4
25°	1173.6	1171.6	1189.9	1194.0	1196.0
27.5°	1145.2	1143.1	1161.4	1167.5	1171.6
30°	1112.6	1112.6	1132.9	1141.1	1147.2
32.5°	1076.0	1082.1	1100.4	1112.6	1120.7
35°	1041.4	1049.6	1069.9	1084.1	1094.3
37.5°	1002.8	1010.9	1033.3	1051.6	1063.8
40°	962.1	972.3	998.7	1019.0	1037.3
42.5°	921.4	931.6	960.1	990.6	1015.0
45°	874.6	888.9	919.4	962.1	990.6
47.5°	827.8	842.1	880.7	933.6	962.1
50°	779.0	795.3	842.1	903.1	933.6
52.5°	728.2	746.5	805.5	870.6	901.1
55°	675.3	697.7	764.8	833.9	866.5
57.5°	620.4	644.8	724.1	797.3	831.9
60°	563.4	593.9	681.4	758.7	795.3
62.5°	504.4	541.0	638.7	718.0	756.7
65°	443.4	486.1	593.9	677.3	716.0
67.5°	380.4	437.3	549.2	636.6	675.3
70°	317.3	384.4	502.4	591.9	630.5
72.5°	258.3	335.6	455.6	539.0	547.2
75°	201.4	286.8	406.8	414.9	400.7
77.5°	150.5	238.0	335.6	299.0	297.0
80°	107.8	191.2	215.6	221.7	223.7
82.5°	71.2	144.4	140.3	144.4	142.4
85°	42.7	71.2	73.2	71.2	67.1
87.5°	20.3	26.4	20.3	18.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)