

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: P276843

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276843  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-65HE-RDP-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3534.7 lumens  
Efficiency: N/A  
Efficacy: 70.9 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

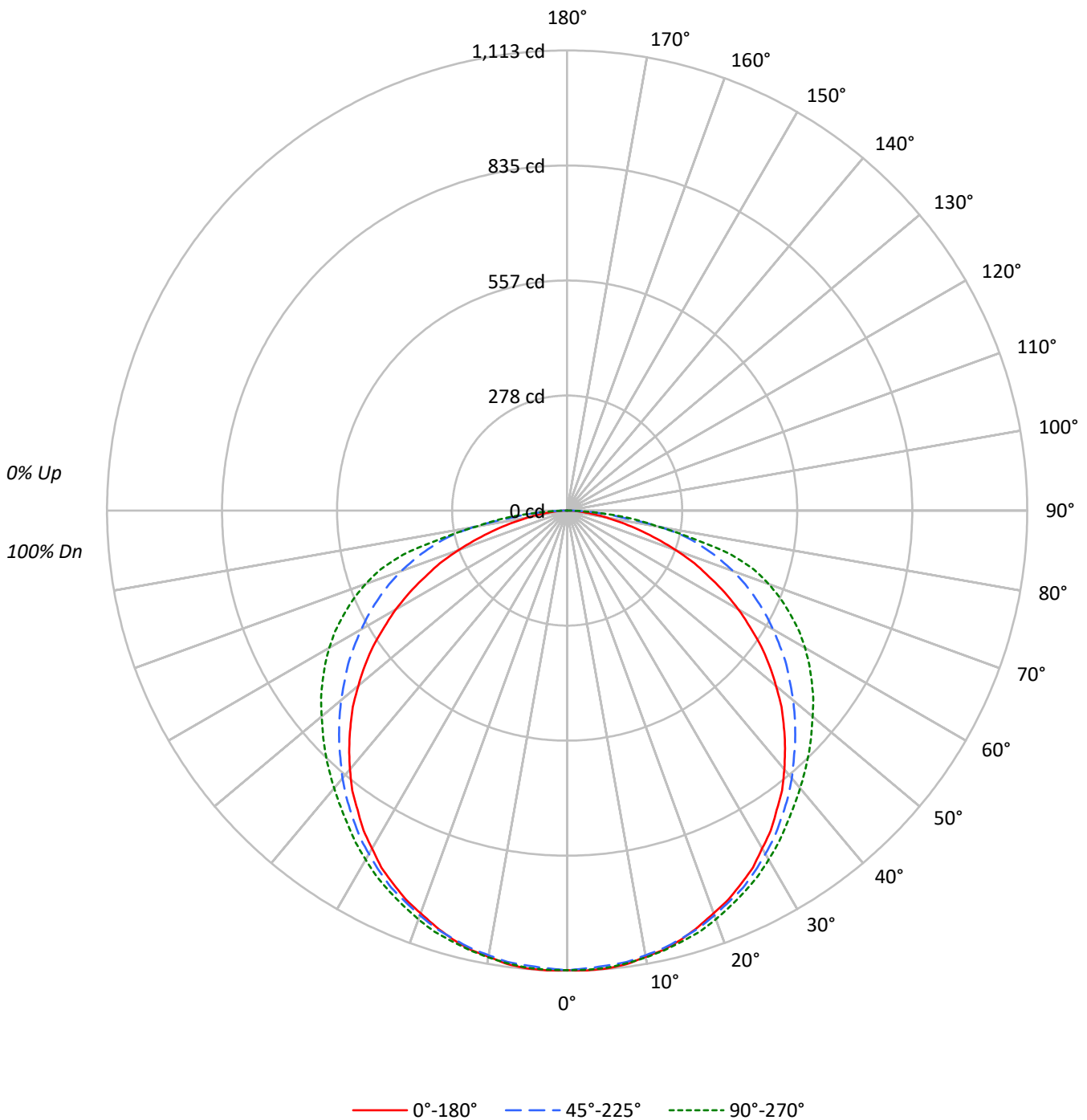
Input Watts (W): 49.847442  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1496	1496	1496
5°	1501	1492	1499
10°	1497	1492	1499
15°	1495	1492	1502
20°	1484	1491	1506
25°	1478	1494	1510
30°	1466	1490	1514
35°	1451	1486	1520
40°	1435	1484	1540
45°	1411	1485	1575
50°	1380	1494	1622
55°	1345	1518	1694
60°	1288	1548	1788
65°	1206	1602	1898
70°	1097	1676	2042
75°	930	1768	2133
80°	734	1780	1726
85°	542	1354	1516



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.4	3.0
10°-20°	303.5	8.6
20°-30°	464.1	13.1
30°-40°	567.3	16.0
40°-50°	604.6	17.1
50°-60°	578.1	16.4
60°-70°	489.7	13.9
70°-80°	329.1	9.3
80°-90°	92.9	2.6
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°	873.0	24.7
0°-40°	1440.3	40.7
0°-60°	2623.0	74.2
0°-90°	3534.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3534.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1110	1105	1110	1110	106
15°	1073	1073	1071	1080	1078	303
25°	996	999	1006	1015	1017	459
35°	884	891	905	922	926	554
45°	742	754	780	814	828	572
55°	573	594	647	698	722	511
65°	379	417	503	570	596	376
75°	179	244	340	398	410	191
85°	35	72	88	95	98	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1111.6	1111.6	1111.6	1111.6	1111.6
2.5°	1113.3	1113.3	1108.1	1111.6	1111.6
5°	1111.6	1109.8	1104.6	1109.8	1109.8
7.5°	1106.3	1104.6	1101.0	1106.3	1104.6
10°	1095.8	1095.8	1092.3	1097.5	1097.5
12.5°	1087.0	1085.3	1083.5	1090.5	1088.8
15°	1073.0	1073.0	1071.2	1080.0	1078.3
17.5°	1055.5	1057.2	1059.0	1066.0	1067.7
20°	1036.2	1039.7	1041.4	1052.0	1052.0
22.5°	1018.6	1020.4	1023.9	1034.4	1034.4
25°	995.9	999.4	1006.4	1015.1	1016.9
27.5°	973.1	974.8	983.6	995.9	997.6
30°	943.3	948.5	959.0	973.1	974.8
32.5°	917.0	922.2	934.5	948.5	952.0
35°	883.6	890.7	904.7	922.2	925.7
37.5°	853.8	859.1	876.6	895.9	901.2
40°	817.0	827.5	845.1	867.9	876.6
42.5°	780.2	790.7	811.8	841.6	852.1
45°	741.6	753.9	780.2	813.5	827.5
47.5°	703.1	717.1	746.9	785.5	801.2
50°	659.2	676.8	713.6	757.4	774.9
52.5°	617.1	638.2	678.5	727.6	750.4
55°	573.3	594.4	647.0	697.8	722.3
57.5°	524.2	552.3	610.1	668.0	694.3
60°	478.6	504.9	575.1	638.2	664.5
62.5°	429.5	464.6	540.0	606.6	632.9
65°	378.7	417.3	503.2	569.8	596.1
67.5°	333.1	375.2	466.4	533.0	559.3
70°	278.8	331.4	426.0	492.7	519.0
72.5°	227.9	285.8	384.0	448.8	473.4
75°	178.8	243.7	340.1	398.0	410.3
77.5°	133.2	201.6	294.5	319.1	310.3
80°	94.7	161.3	229.7	217.4	222.7
82.5°	61.4	122.7	142.0	161.3	166.6
85°	35.1	71.9	87.7	94.7	98.2
87.5°	15.8	26.3	35.1	35.1	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)