

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: P276767

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276767  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3930.0 lumens  
Efficiency: N/A  
Efficacy: 80.5 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

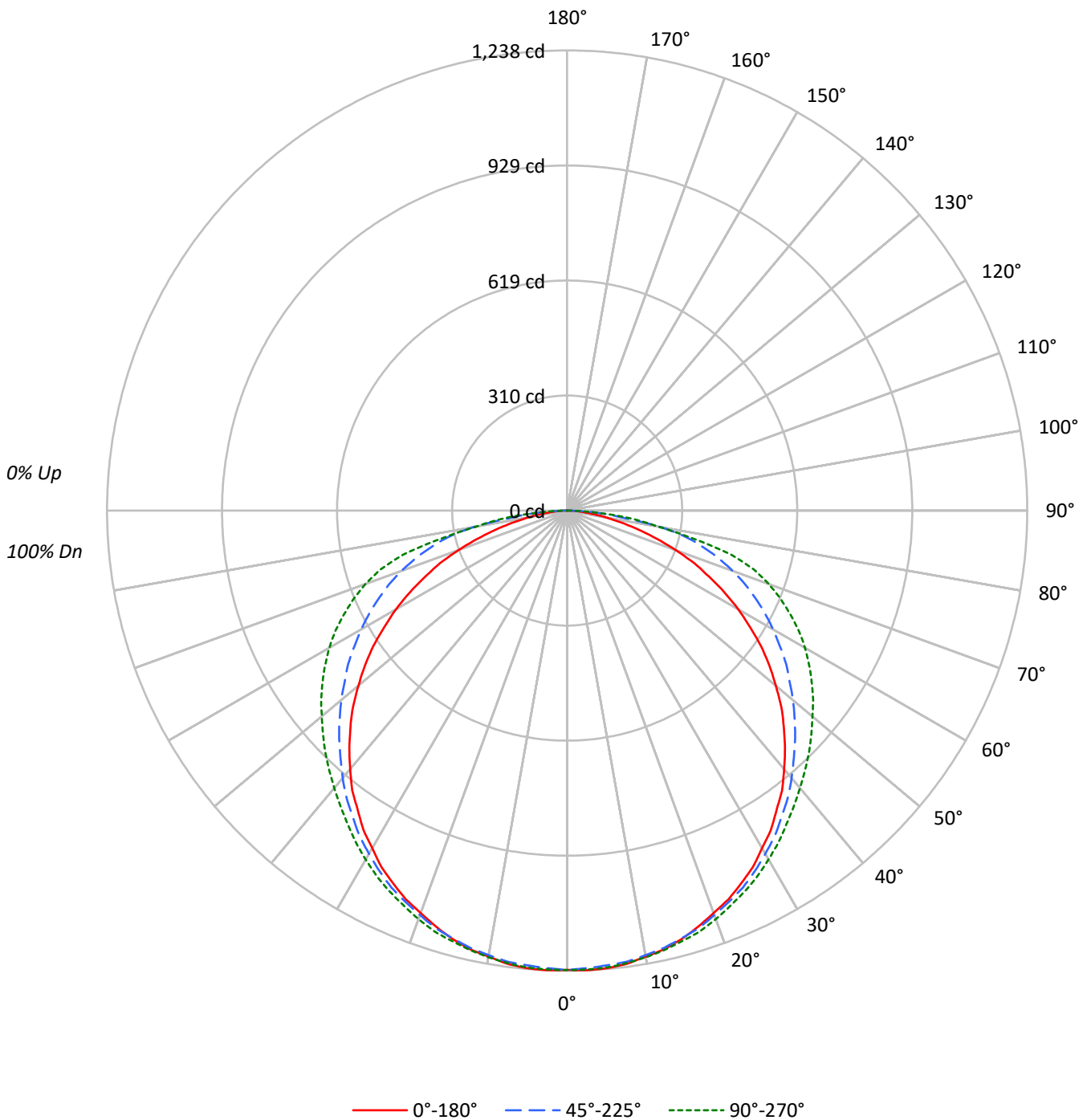
Input Watts (W): 48.820164  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276767

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P276767

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3000K

**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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

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

	0°	45°	90°
0°	1663	1663	1663
5°	1669	1659	1667
10°	1664	1659	1667
15°	1662	1659	1670
20°	1650	1658	1675
25°	1644	1661	1678
30°	1629	1657	1684
35°	1614	1652	1691
40°	1596	1650	1712
45°	1569	1651	1751
50°	1534	1661	1804
55°	1495	1687	1884
60°	1432	1721	1988
65°	1341	1781	2110
70°	1219	1864	2270
75°	1033	1966	2371
80°	816	1979	1918
85°	602	1505	1686



TEST NUMBER: P276767

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	3.0
10°-20°	337.4	8.6
20°-30°	516.0	13.1
30°-40°	630.8	16.0
40°-50°	672.2	17.1
50°-60°	642.8	16.4
60°-70°	544.5	13.9
70°-80°	365.9	9.3
80°-90°	103.2	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°	970.6	24.7
0°-40°	1601.3	40.7
0°-60°	2916.3	74.2
0°-90°	3930.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3930.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1236	1234	1228	1234	1234	117
15°	1193	1193	1191	1201	1199	336
25°	1107	1111	1119	1129	1131	510
35°	982	990	1006	1025	1029	615
45°	825	838	868	904	920	636
55°	637	661	719	776	803	568
65°	421	464	560	634	663	418
75°	199	271	378	442	456	213
85°	39	80	98	105	109	48
90°	0	0	0	0	0	



TEST NUMBER: P276767

CATALOG NUMBER: 24CZ2-65HE-RDP-UNV-L83050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1235.9	1235.9	1235.9	1235.9	1235.9
2.5°	1237.8	1237.8	1232.0	1235.9	1235.9
5°	1235.9	1233.9	1228.1	1233.9	1233.9
7.5°	1230.0	1228.1	1224.2	1230.0	1228.1
10°	1218.3	1218.3	1214.4	1220.3	1220.3
12.5°	1208.6	1206.6	1204.7	1212.5	1210.5
15°	1193.0	1193.0	1191.0	1200.8	1198.8
17.5°	1173.5	1175.4	1177.4	1185.2	1187.1
20°	1152.1	1156.0	1157.9	1169.6	1169.6
22.5°	1132.6	1134.5	1138.4	1150.1	1150.1
25°	1107.2	1111.1	1118.9	1128.7	1130.6
27.5°	1081.9	1083.8	1093.6	1107.2	1109.2
30°	1048.7	1054.6	1066.3	1081.9	1083.8
32.5°	1019.5	1025.3	1039.0	1054.6	1058.5
35°	982.5	990.3	1005.9	1025.3	1029.2
37.5°	949.3	955.2	974.7	996.1	1002.0
40°	908.4	920.1	939.6	964.9	974.7
42.5°	867.5	879.1	902.5	935.7	947.4
45°	824.6	838.2	867.5	904.5	920.1
47.5°	781.7	797.3	830.4	873.3	890.8
50°	732.9	752.4	793.4	842.1	861.6
52.5°	686.2	709.6	754.4	809.0	834.3
55°	637.4	660.8	719.3	775.8	803.1
57.5°	582.8	614.0	678.4	742.7	771.9
60°	532.2	561.4	639.4	709.6	738.8
62.5°	477.6	516.6	600.4	674.5	703.7
65°	421.1	463.9	559.5	633.5	662.8
67.5°	370.4	417.2	518.5	592.6	621.8
70°	309.9	368.4	473.7	547.8	577.0
72.5°	253.4	317.7	426.9	499.0	526.3
75°	198.8	271.0	378.2	442.5	456.1
77.5°	148.1	224.2	327.5	354.8	345.0
80°	105.3	179.3	255.4	241.7	247.6
82.5°	68.2	136.5	157.9	179.3	185.2
85°	39.0	79.9	97.5	105.3	109.2
87.5°	17.5	29.2	39.0	39.0	37.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)