

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: P276951

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276951  
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-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4323.9 lumens  
Efficiency: N/A  
Efficacy: 85.9 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

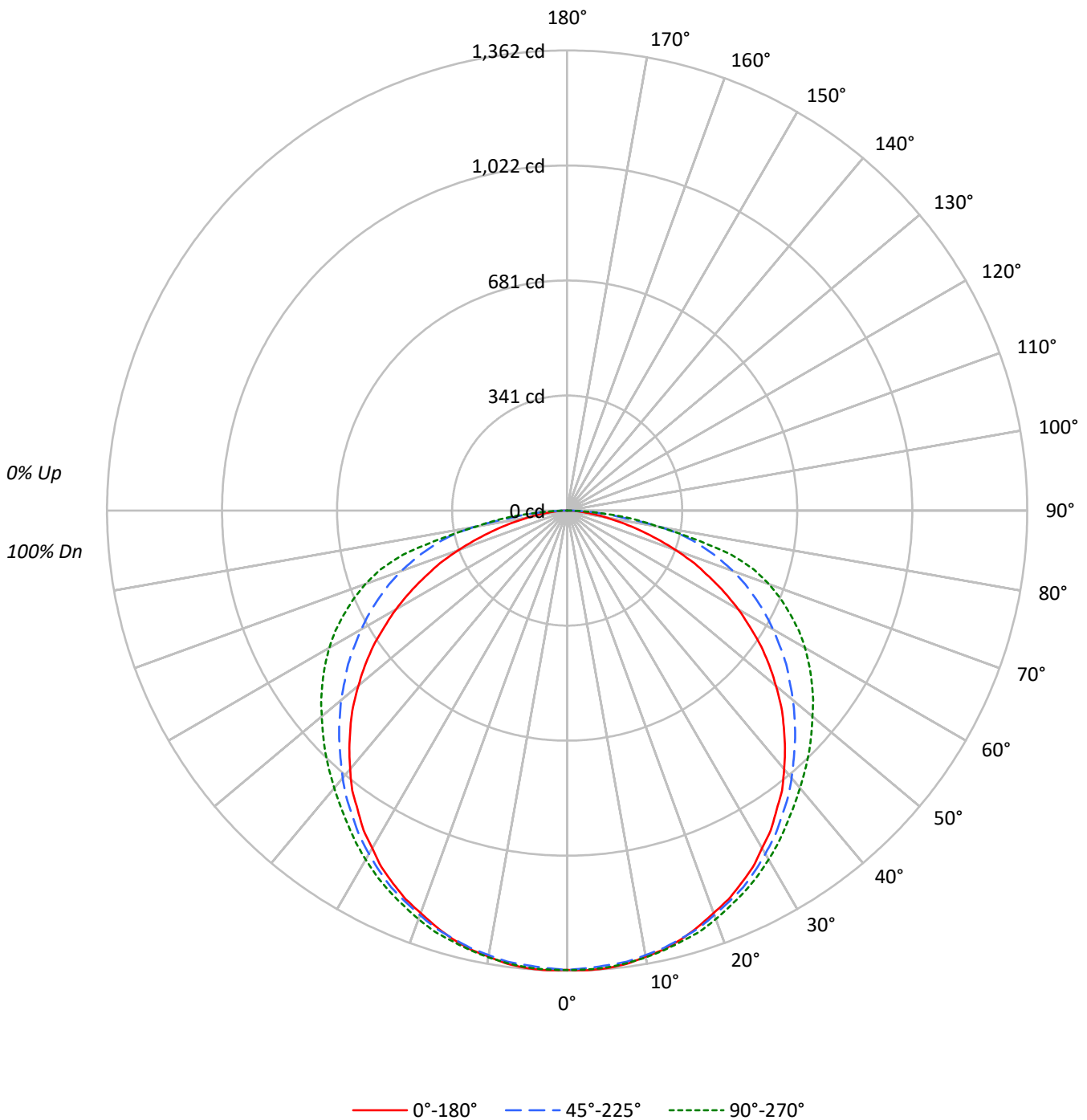
Input Watts (W): 50.313  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1829	1829	1829
5°	1836	1825	1834
10°	1831	1826	1834
15°	1828	1825	1837
20°	1815	1824	1842
25°	1809	1828	1847
30°	1793	1823	1853
35°	1775	1818	1860
40°	1755	1816	1884
45°	1726	1816	1926
50°	1688	1827	1984
55°	1645	1856	2073
60°	1576	1893	2187
65°	1475	1960	2322
70°	1341	2050	2497
75°	1137	2163	2609
80°	897	2177	2111
85°	662	1655	1854



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.0	3.0
10°-20°	371.2	8.6
20°-30°	567.7	13.1
30°-40°	694.0	16.0
40°-50°	739.6	17.1
50°-60°	707.2	16.4
60°-70°	599.1	13.9
70°-80°	402.6	9.3
80°-90°	113.6	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°	1067.9	24.7
0°-40°	1761.8	40.7
0°-60°	3208.7	74.2
0°-90°	4323.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4323.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1360	1358	1351	1358	1358	129
15°	1313	1313	1310	1321	1319	370
25°	1218	1222	1231	1242	1244	561
35°	1081	1090	1107	1128	1132	677
45°	907	922	954	995	1012	700
55°	701	727	791	854	884	625
65°	463	510	616	697	729	460
75°	219	298	416	487	502	234
85°	43	88	107	116	120	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1359.7	1359.7	1359.7	1359.7	1359.7
2.5°	1361.9	1361.9	1355.5	1359.7	1359.7
5°	1359.7	1357.6	1351.2	1357.6	1357.6
7.5°	1353.3	1351.2	1346.9	1353.3	1351.2
10°	1340.4	1340.4	1336.2	1342.6	1342.6
12.5°	1329.7	1327.6	1325.4	1334.0	1331.9
15°	1312.6	1312.6	1310.4	1321.1	1319.0
17.5°	1291.1	1293.3	1295.4	1304.0	1306.1
20°	1267.5	1271.8	1274.0	1286.8	1286.8
22.5°	1246.1	1248.2	1252.5	1265.4	1265.4
25°	1218.2	1222.5	1231.1	1241.8	1243.9
27.5°	1190.3	1192.5	1203.2	1218.2	1220.3
30°	1153.9	1160.3	1173.2	1190.3	1192.5
32.5°	1121.7	1128.1	1143.1	1160.3	1164.6
35°	1080.9	1089.5	1106.7	1128.1	1132.4
37.5°	1044.5	1050.9	1072.4	1095.9	1102.4
40°	999.4	1012.3	1033.8	1061.6	1072.4
42.5°	954.4	967.3	993.0	1029.5	1042.3
45°	907.2	922.2	954.4	995.1	1012.3
47.5°	860.0	877.2	913.6	960.8	980.1
50°	806.4	827.9	872.9	926.5	948.0
52.5°	754.9	780.7	830.0	890.1	917.9
55°	701.3	727.1	791.4	853.6	883.6
57.5°	641.3	675.6	746.4	817.1	849.3
60°	585.5	617.7	703.5	780.7	812.8
62.5°	525.5	568.3	660.6	742.1	774.2
65°	463.3	510.4	615.5	697.0	729.2
67.5°	407.5	459.0	570.5	652.0	684.2
70°	341.0	405.4	521.2	602.7	634.8
72.5°	278.8	349.6	469.7	549.0	579.1
75°	218.8	298.1	416.1	486.9	501.9
77.5°	163.0	246.6	360.3	390.3	379.6
80°	115.8	197.3	281.0	265.9	272.4
82.5°	75.1	150.1	173.7	197.3	203.7
85°	42.9	87.9	107.2	115.8	120.1
87.5°	19.3	32.2	42.9	42.9	40.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)