

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: P276948

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276948  
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-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4150.9 lumens  
Efficiency: N/A  
Efficacy: 83.9 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

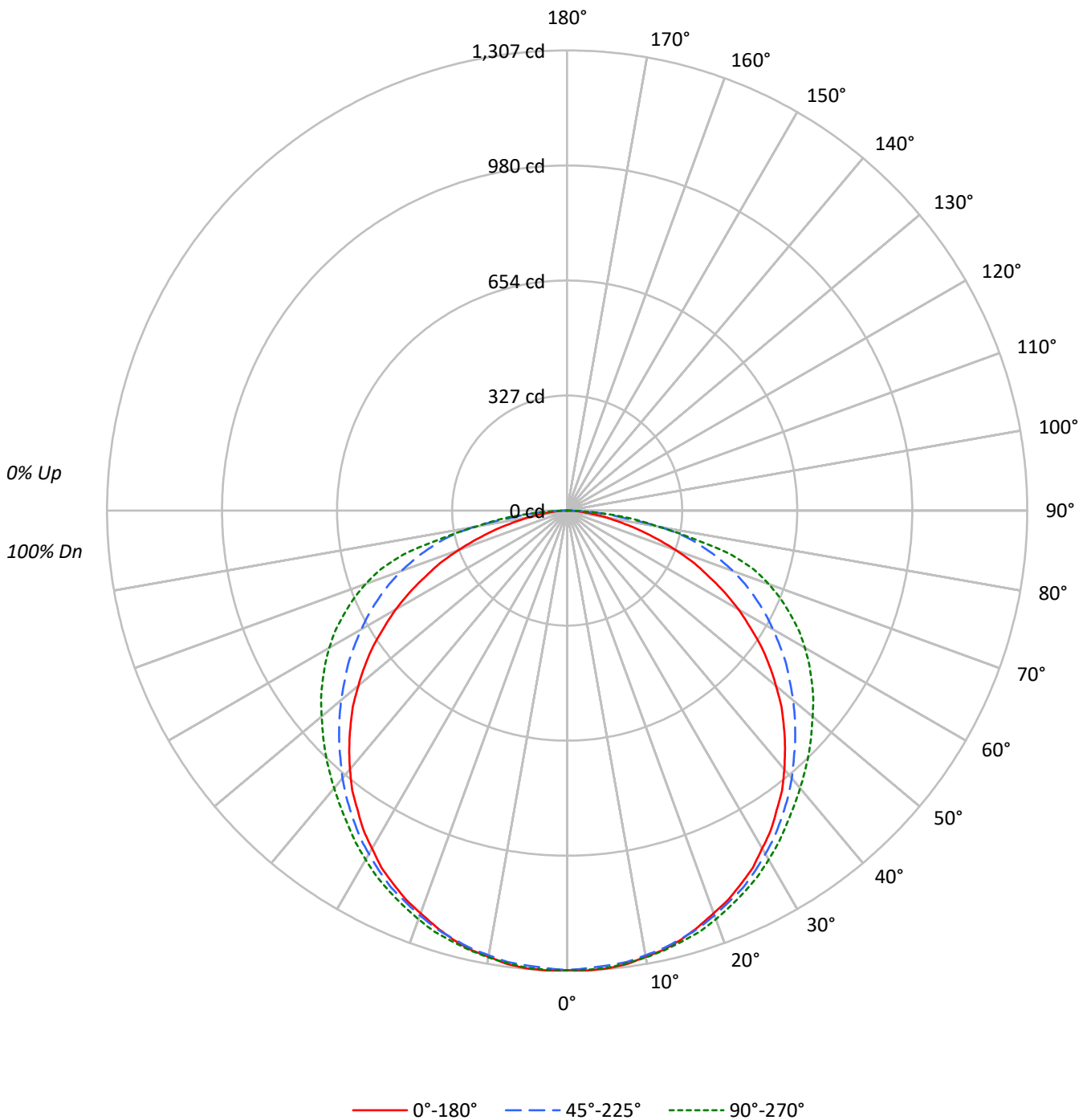
Input Watts (W): 49.476  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1756	1756	1756
5°	1763	1752	1760
10°	1758	1752	1761
15°	1755	1752	1764
20°	1742	1751	1769
25°	1736	1754	1773
30°	1721	1750	1778
35°	1704	1745	1786
40°	1685	1743	1808
45°	1657	1743	1849
50°	1620	1754	1905
55°	1579	1782	1990
60°	1513	1817	2100
65°	1416	1881	2229
70°	1288	1968	2397
75°	1092	2076	2505
80°	862	2090	2026
85°	636	1589	1780



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	3.0
10°-20°	356.4	8.6
20°-30°	544.9	13.1
30°-40°	666.2	16.0
40°-50°	710.0	17.1
50°-60°	678.9	16.4
60°-70°	575.1	13.9
70°-80°	386.5	9.3
80°-90°	109.0	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°	1025.1	24.7
0°-40°	1691.3	40.7
0°-60°	3080.2	74.2
0°-90°	4150.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4150.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1305	1303	1297	1303	1303	124
15°	1260	1260	1258	1268	1266	355
25°	1169	1174	1182	1192	1194	539
35°	1038	1046	1062	1083	1087	650
45°	871	885	916	955	972	672
55°	673	698	760	819	848	600
65°	445	490	591	669	700	442
75°	210	286	399	467	482	225
85°	41	84	103	111	115	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1307.4	1307.4	1301.2	1305.3	1305.3
5°	1305.3	1303.3	1297.1	1303.3	1303.3
7.5°	1299.2	1297.1	1293.0	1299.2	1297.1
10°	1286.8	1286.8	1282.7	1288.9	1288.9
12.5°	1276.5	1274.4	1272.4	1280.6	1278.6
15°	1260.0	1260.0	1258.0	1268.3	1266.2
17.5°	1239.4	1241.5	1243.6	1251.8	1253.9
20°	1216.8	1220.9	1223.0	1235.3	1235.3
22.5°	1196.2	1198.3	1202.4	1214.7	1214.7
25°	1169.4	1173.6	1181.8	1192.1	1194.1
27.5°	1142.7	1144.7	1155.0	1169.4	1171.5
30°	1107.7	1113.9	1126.2	1142.7	1144.7
32.5°	1076.8	1083.0	1097.4	1113.9	1118.0
35°	1037.7	1045.9	1062.4	1083.0	1087.1
37.5°	1002.7	1008.8	1029.4	1052.1	1058.3
40°	959.4	971.8	992.4	1019.1	1029.4
42.5°	916.2	928.6	953.3	988.3	1000.6
45°	870.9	885.3	916.2	955.3	971.8
47.5°	825.6	842.1	877.1	922.4	940.9
50°	774.1	794.7	838.0	889.4	910.0
52.5°	724.7	749.4	796.8	854.4	881.2
55°	673.3	698.0	759.7	819.4	848.3
57.5°	615.6	648.5	716.5	784.4	815.3
60°	562.1	593.0	675.3	749.4	780.3
62.5°	504.4	545.6	634.1	712.4	743.3
65°	444.7	490.0	590.9	669.1	700.0
67.5°	391.2	440.6	547.7	625.9	656.8
70°	327.4	389.1	500.3	578.5	609.4
72.5°	267.7	335.6	450.9	527.1	555.9
75°	210.0	286.2	399.4	467.4	481.8
77.5°	156.5	236.8	345.9	374.7	364.4
80°	111.2	189.4	269.7	255.3	261.5
82.5°	72.1	144.1	166.8	189.4	195.6
85°	41.2	84.4	102.9	111.2	115.3
87.5°	18.5	30.9	41.2	41.2	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)