

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: P473818

Luminaire Tested: **24CZ2-65-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P473818  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-65-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6412.9 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

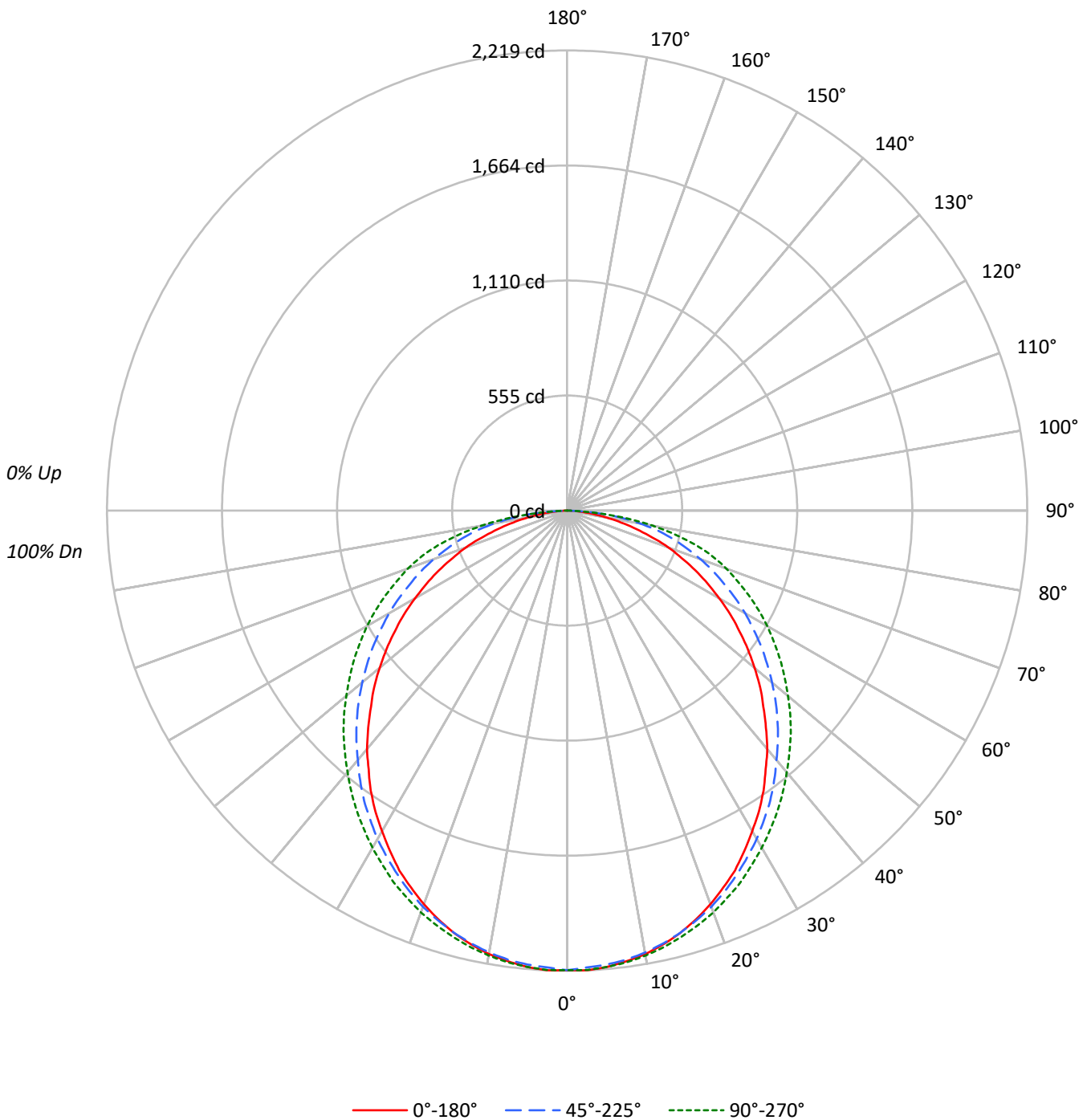
Input Watts (W): 51  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

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

	0°	45°	90°
0°	2982	2982	2982
5°	2983	2968	2983
10°	2967	2957	2977
15°	2937	2935	2964
20°	2893	2911	2952
25°	2842	2875	2938
30°	2773	2841	2917
35°	2711	2804	2905
40°	2637	2759	2893
45°	2547	2730	2902
50°	2470	2700	2910
55°	2379	2681	2943
60°	2281	2668	2997
65°	2174	2658	3074
70°	2046	2686	3216
75°	1799	2741	3345
80°	1501	2762	3227
85°	1071	2367	2399



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.5	3.3
10°-20°	596.7	9.3
20°-30°	895.2	14.0
30°-40°	1068.7	16.7
40°-50°	1107.0	17.3
50°-60°	1019.1	15.9
60°-70°	822.1	12.8
70°-80°	537.1	8.4
80°-90°	157.5	2.5
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°	1701.3	26.5
0°-40°	2770.1	43.2
0°-60°	4896.2	76.3
0°-90°	6412.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6412.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2216	2216	2216	2216	2216	
5°	2209	2207	2197	2210	2209	210
15°	2108	2108	2107	2128	2128	594
25°	1915	1919	1936	1972	1979	880
35°	1650	1665	1707	1754	1768	1031
45°	1338	1372	1435	1499	1525	1035
55°	1014	1058	1143	1227	1255	908
65°	683	729	835	930	966	675
75°	346	411	527	618	643	369
85°	69	120	153	163	155	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2216.1	2216.1	2216.1	2216.1	2216.1
2.5°	2219.2	2216.1	2204.7	2218.1	2217.1
5°	2208.8	2206.7	2197.4	2209.8	2208.8
7.5°	2192.2	2191.2	2183.9	2197.4	2197.4
10°	2171.5	2169.4	2164.3	2179.8	2178.8
12.5°	2142.5	2141.5	2138.4	2157.0	2156.0
15°	2108.3	2108.3	2107.3	2128.0	2128.0
17.5°	2066.9	2067.9	2072.1	2095.9	2096.9
20°	2020.3	2024.4	2032.7	2059.6	2061.7
22.5°	1967.4	1975.7	1987.1	2017.1	2020.3
25°	1914.6	1918.7	1936.3	1971.6	1978.8
27.5°	1850.3	1860.7	1883.5	1919.8	1927.0
30°	1785.1	1799.6	1828.6	1865.9	1877.3
32.5°	1720.8	1733.3	1767.5	1809.9	1823.4
35°	1650.4	1664.9	1707.4	1754.0	1768.5
37.5°	1572.7	1595.5	1640.0	1693.9	1709.4
40°	1501.2	1521.9	1570.6	1630.7	1647.3
42.5°	1419.4	1445.3	1504.3	1565.4	1586.2
45°	1338.5	1371.7	1434.9	1499.1	1525.0
47.5°	1262.9	1289.9	1364.4	1437.0	1459.8
50°	1180.0	1211.1	1289.9	1366.5	1390.3
52.5°	1098.2	1135.5	1215.3	1296.1	1322.0
55°	1014.3	1057.8	1142.7	1226.7	1254.6
57.5°	933.5	977.0	1065.0	1154.1	1183.1
60°	847.5	894.1	991.5	1077.5	1113.7
62.5°	764.6	811.2	913.8	1007.0	1041.2
65°	682.7	729.4	835.0	930.4	965.6
67.5°	597.8	648.6	761.5	853.7	887.9
70°	520.1	568.8	682.7	781.2	817.4
72.5°	431.0	489.0	605.0	702.4	736.6
75°	346.0	411.3	527.3	618.5	643.4
77.5°	267.3	332.6	448.6	517.0	532.5
80°	193.7	260.0	356.4	404.1	416.5
82.5°	125.4	193.7	258.0	290.1	294.2
85°	69.4	120.2	153.3	162.7	155.4
87.5°	24.9	45.6	44.5	36.3	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)