

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: P473824

Luminaire Tested: **24CZ2-55HE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P473824  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5721.9 lumens  
Efficiency: N/A  
Efficacy: 131.5 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

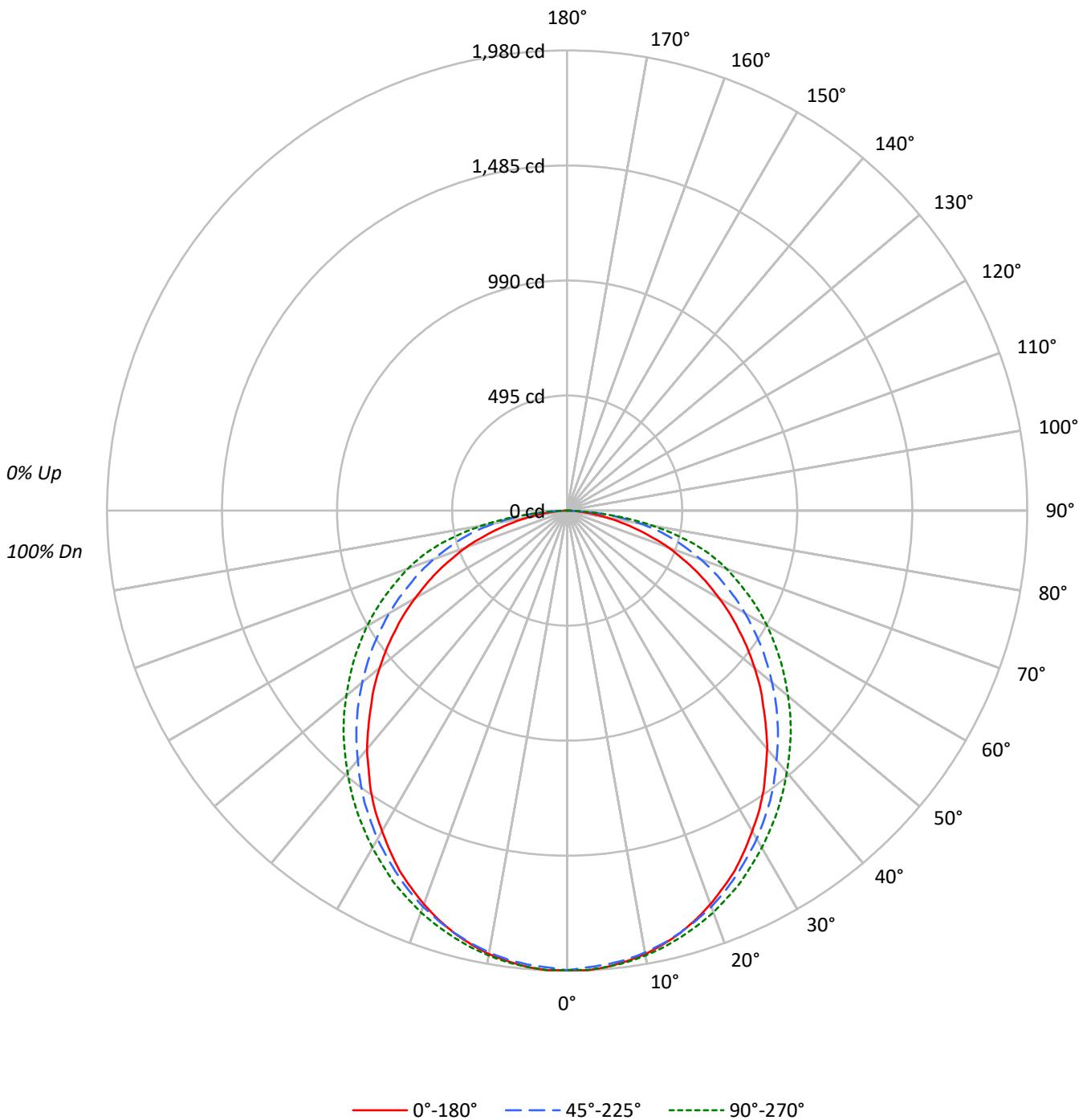
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2660	2660	2660
5°	2662	2648	2662
10°	2647	2638	2656
15°	2620	2619	2645
20°	2581	2597	2634
25°	2536	2565	2621
30°	2474	2535	2602
35°	2419	2502	2592
40°	2353	2461	2582
45°	2273	2436	2589
50°	2204	2409	2597
55°	2123	2392	2626
60°	2035	2380	2674
65°	1940	2372	2743
70°	1825	2397	2869
75°	1605	2446	2984
80°	1340	2464	2879
85°	956	2112	2141



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.9	3.3
10°-20°	532.4	9.3
20°-30°	798.7	14.0
30°-40°	953.6	16.7
40°-50°	987.7	17.3
50°-60°	909.3	15.9
60°-70°	733.5	12.8
70°-80°	479.2	8.4
80°-90°	140.5	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°	1518.0	26.5
0°-40°	2471.6	43.2
0°-60°	4368.6	76.3
0°-90°	5721.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5721.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1977	1977	1977	1977	1977	
5°	1971	1969	1961	1972	1971	187
15°	1881	1881	1880	1899	1899	530
25°	1708	1712	1728	1759	1766	785
35°	1473	1486	1523	1565	1578	920
45°	1194	1224	1280	1338	1361	923
55°	905	944	1020	1094	1119	810
65°	609	651	745	830	862	602
75°	309	367	470	552	574	330
85°	62	107	137	145	139	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1977.3	1977.3	1977.3	1977.3	1977.3
2.5°	1980.1	1977.3	1967.1	1979.1	1978.2
5°	1970.8	1969.0	1960.6	1971.7	1970.8
7.5°	1956.0	1955.1	1948.6	1960.6	1960.6
10°	1937.5	1935.7	1931.1	1944.9	1944.0
12.5°	1911.6	1910.7	1907.9	1924.6	1923.7
15°	1881.1	1881.1	1880.2	1898.7	1898.7
17.5°	1844.2	1845.1	1848.8	1870.0	1871.0
20°	1802.6	1806.3	1813.7	1837.7	1839.5
22.5°	1755.4	1762.8	1773.0	1799.8	1802.6
25°	1708.3	1712.0	1727.7	1759.1	1765.6
27.5°	1651.0	1660.2	1680.5	1712.9	1719.4
30°	1592.7	1605.7	1631.6	1664.8	1675.0
32.5°	1535.4	1546.5	1577.0	1614.9	1626.9
35°	1472.6	1485.5	1523.4	1565.0	1577.9
37.5°	1403.2	1423.6	1463.3	1511.4	1525.3
40°	1339.4	1357.9	1401.4	1455.0	1469.8
42.5°	1266.4	1289.5	1342.2	1396.8	1415.2
45°	1194.3	1223.9	1280.3	1337.6	1360.7
47.5°	1126.8	1150.9	1217.4	1282.1	1302.5
50°	1052.9	1080.6	1150.9	1219.3	1240.5
52.5°	979.9	1013.1	1084.3	1156.4	1179.5
55°	905.0	943.8	1019.6	1094.5	1119.4
57.5°	832.9	871.7	950.3	1029.8	1055.7
60°	756.2	797.8	884.6	961.4	993.7
62.5°	682.2	723.8	815.3	898.5	929.0
65°	609.2	650.8	745.1	830.1	861.5
67.5°	533.4	578.7	679.4	761.7	792.2
70°	464.0	507.5	609.2	697.0	729.3
72.5°	384.5	436.3	539.8	626.7	657.2
75°	308.7	367.0	470.5	551.9	574.0
77.5°	238.5	296.7	400.3	461.3	475.1
80°	172.9	232.0	318.0	360.5	371.6
82.5°	111.9	172.9	230.2	258.8	262.5
85°	61.9	107.2	136.8	145.1	138.7
87.5°	22.2	40.7	39.7	32.4	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)