

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: P474578

Luminaire Tested: **24CZ2-75HE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474578
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7139.2 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

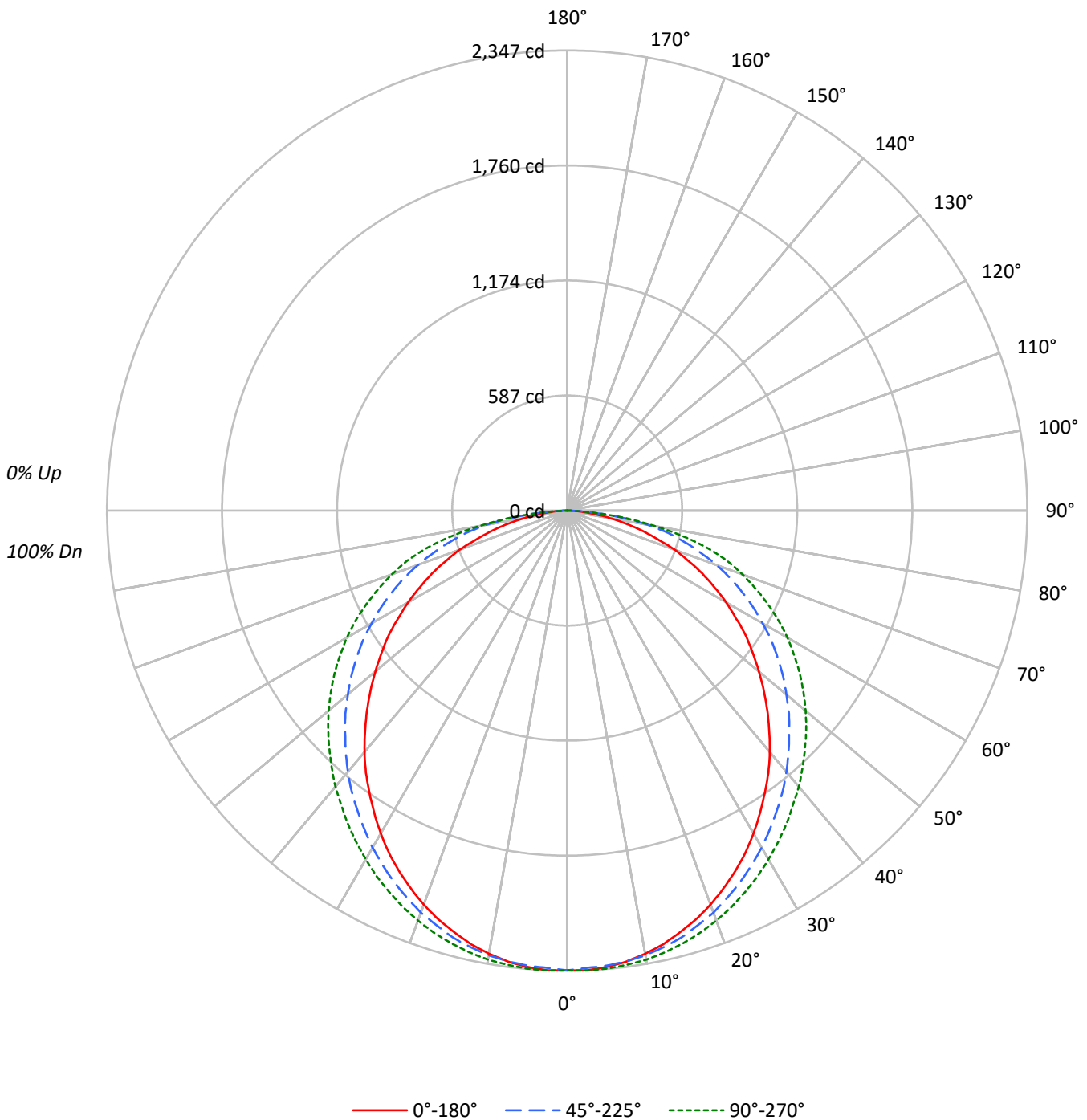
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6310	6310	6310
5°	6310	6291	6334
10°	6271	6292	6355
15°	6203	6279	6364
20°	6124	6248	6372
25°	6024	6204	6373
30°	5908	6167	6383
35°	5774	6130	6407
40°	5649	6110	6459
45°	5495	6094	6528
50°	5348	6112	6647
55°	5223	6153	6796
60°	5046	6200	6986
65°	4844	6274	7197
70°	4595	6363	7484
75°	4115	6451	7731
80°	3464	6468	7017
85°	2572	4894	4613



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	3.1
10°-20°	636.9	8.9
20°-30°	964.1	13.5
30°-40°	1166.3	16.3
40°-50°	1231.1	17.2
50°-60°	1160.9	16.3
60°-70°	957.1	13.4
70°-80°	627.9	8.8
80°-90°	172.6	2.4
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°	1823.2	25.5
0°-40°	2989.5	41.9
0°-60°	5381.5	75.4
0°-90°	7139.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7139.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2345	2345	2345	2345	2345	
5°	2336	2336	2329	2345	2345	222
15°	2226	2239	2254	2280	2284	628
25°	2029	2054	2090	2133	2146	934
35°	1758	1803	1866	1930	1950	1100
45°	1444	1509	1601	1687	1715	1114
55°	1113	1192	1312	1410	1448	992
65°	761	852	985	1090	1130	751
75°	396	497	620	718	744	418
85°	83	144	158	154	149	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2345.0	2345.0	2345.0	2345.0	2345.0
2.5°	2347.3	2345.0	2334.7	2348.4	2347.3
5°	2335.9	2335.9	2329.0	2345.0	2345.0
7.5°	2319.9	2321.0	2318.7	2337.0	2337.0
10°	2294.8	2299.4	2302.8	2323.3	2325.6
12.5°	2265.1	2273.1	2280.0	2305.1	2307.3
15°	2226.4	2238.9	2253.7	2280.0	2284.5
17.5°	2186.4	2201.3	2217.2	2251.5	2257.2
20°	2138.5	2155.6	2181.9	2216.1	2225.2
22.5°	2084.9	2108.9	2136.3	2177.3	2188.7
25°	2029.0	2054.1	2089.5	2132.8	2146.5
27.5°	1968.6	1998.3	2038.2	2088.4	2103.2
30°	1901.3	1935.5	1984.6	2038.2	2054.1
32.5°	1830.6	1870.5	1925.3	1984.6	2002.8
35°	1757.6	1803.2	1865.9	1929.8	1950.3
37.5°	1685.7	1731.4	1805.5	1872.8	1892.2
40°	1608.2	1658.4	1739.3	1811.2	1838.6
42.5°	1526.1	1585.4	1670.9	1750.8	1777.0
45°	1443.9	1509.0	1601.3	1686.9	1715.4
47.5°	1360.7	1432.5	1534.0	1620.7	1653.8
50°	1277.4	1353.8	1459.9	1553.4	1587.7
52.5°	1193.0	1272.9	1388.1	1487.3	1518.1
55°	1113.2	1191.9	1311.6	1409.7	1448.5
57.5°	1020.8	1109.8	1236.4	1335.6	1373.2
60°	937.5	1024.2	1152.0	1256.9	1298.0
62.5°	847.4	936.4	1071.0	1175.9	1215.8
65°	760.8	852.0	985.4	1090.4	1130.3
67.5°	667.2	763.0	899.9	1001.4	1040.2
70°	584.0	674.1	808.7	912.4	951.2
72.5°	482.5	585.1	714.0	816.6	858.8
75°	395.8	497.3	620.5	718.5	743.6
77.5°	304.5	406.0	528.1	591.9	609.1
80°	223.5	319.4	417.4	451.7	452.8
82.5°	150.6	235.0	290.8	307.9	305.7
85°	83.3	143.7	158.5	154.0	149.4
87.5°	34.2	47.9	38.8	27.4	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)