

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: P474624

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474624
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-SQR-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5436.2 lumens
Efficiency: N/A
Efficacy: 125.0 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

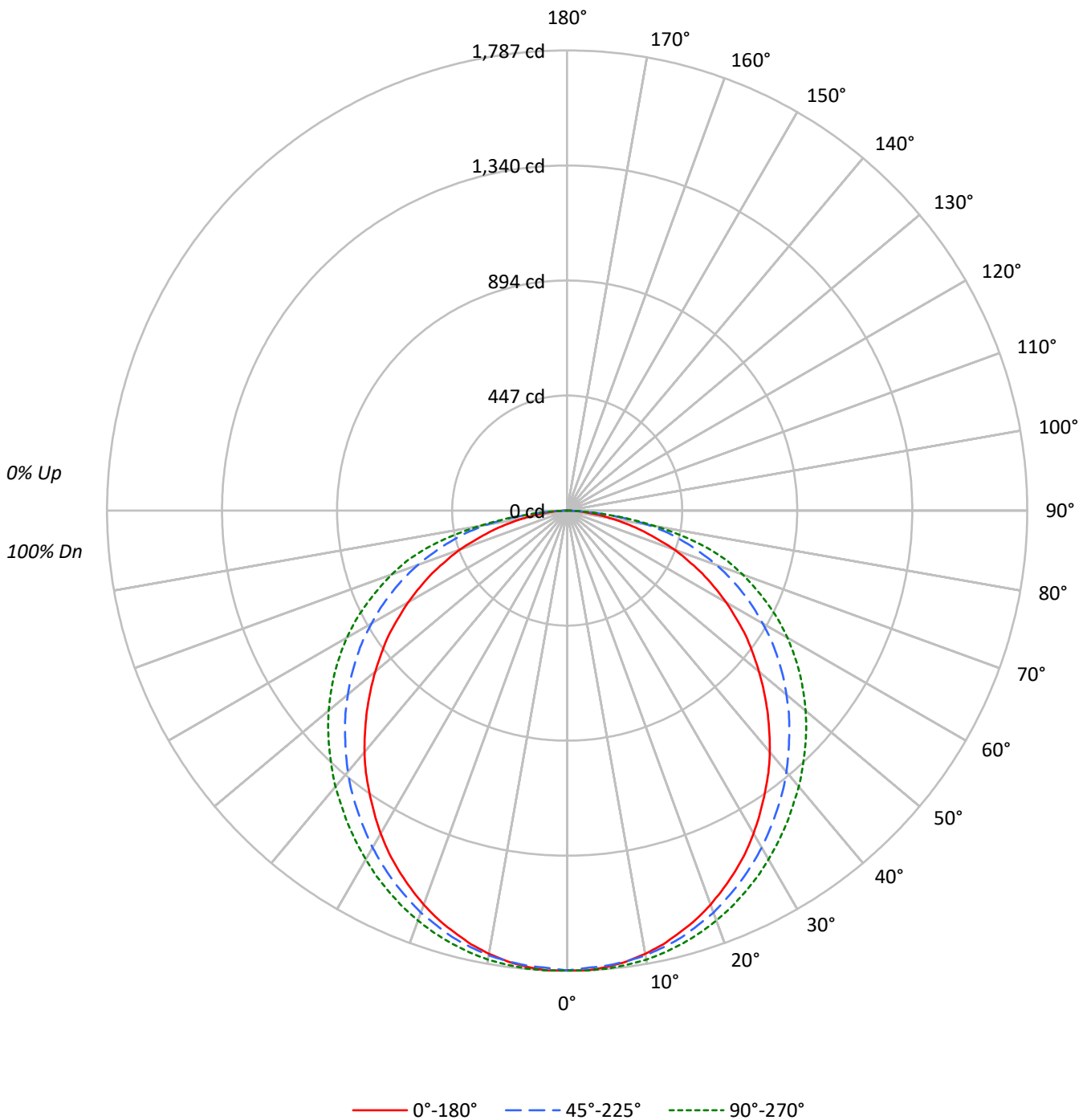
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4805	4805	4805
5°	4805	4791	4823
10°	4775	4791	4839
15°	4723	4781	4846
20°	4663	4758	4852
25°	4587	4724	4853
30°	4499	4696	4860
35°	4396	4668	4879
40°	4302	4653	4918
45°	4184	4641	4971
50°	4072	4654	5061
55°	3977	4686	5175
60°	3842	4721	5319
65°	3689	4778	5480
70°	3499	4845	5699
75°	3134	4913	5888
80°	2638	4926	5343
85°	1958	3727	3514



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.2	3.1
10°-20°	485.0	8.9
20°-30°	734.1	13.5
30°-40°	888.1	16.3
40°-50°	937.4	17.2
50°-60°	884.0	16.3
60°-70°	728.8	13.4
70°-80°	478.1	8.8
80°-90°	131.5	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°	1388.3	25.5
0°-40°	2276.4	41.9
0°-60°	4097.8	75.4
0°-90°	5436.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5436.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1786	1786	1786	1786	1786	
5°	1779	1779	1774	1786	1786	169
15°	1695	1705	1716	1736	1740	478
25°	1545	1564	1591	1624	1634	712
35°	1338	1373	1421	1470	1485	838
45°	1100	1149	1219	1284	1306	849
55°	848	908	999	1074	1103	755
65°	579	649	750	830	861	572
75°	301	379	472	547	566	318
85°	63	109	121	117	114	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1785.6	1785.6	1785.6	1785.6	1785.6
2.5°	1787.4	1785.6	1777.8	1788.2	1787.4
5°	1778.7	1778.7	1773.5	1785.6	1785.6
7.5°	1766.5	1767.4	1765.6	1779.5	1779.5
10°	1747.4	1750.9	1753.5	1769.1	1770.9
12.5°	1724.8	1730.9	1736.1	1755.2	1757.0
15°	1695.3	1704.9	1716.1	1736.1	1739.6
17.5°	1664.9	1676.2	1688.4	1714.4	1718.7
20°	1628.4	1641.5	1661.4	1687.5	1694.4
22.5°	1587.6	1605.8	1626.7	1658.0	1666.6
25°	1545.0	1564.2	1591.1	1624.1	1634.5
27.5°	1499.0	1521.6	1552.0	1590.2	1601.5
30°	1447.8	1473.8	1511.2	1552.0	1564.2
32.5°	1393.9	1424.3	1466.0	1511.2	1525.1
35°	1338.3	1373.1	1420.9	1469.5	1485.1
37.5°	1283.6	1318.4	1374.8	1426.1	1440.8
40°	1224.6	1262.8	1324.5	1379.2	1400.0
42.5°	1162.0	1207.2	1272.3	1333.1	1353.1
45°	1099.5	1149.0	1219.4	1284.5	1306.2
47.5°	1036.1	1090.8	1168.1	1234.1	1259.3
50°	972.7	1030.9	1111.7	1182.9	1208.9
52.5°	908.4	969.2	1057.0	1132.5	1156.0
55°	847.6	907.6	998.8	1073.5	1103.0
57.5°	777.3	845.0	941.4	1017.0	1045.7
60°	713.9	779.9	877.2	957.1	988.3
62.5°	645.3	713.0	815.5	895.4	925.8
65°	579.3	648.8	750.4	830.3	860.7
67.5°	508.1	581.0	685.2	762.5	792.1
70°	444.7	513.3	615.8	694.8	724.3
72.5°	367.4	445.5	543.7	621.8	654.0
75°	301.4	378.7	472.5	547.2	566.3
77.5°	231.9	309.2	402.1	450.7	463.8
80°	170.2	243.2	317.9	343.9	344.8
82.5°	114.6	178.9	221.5	234.5	232.8
85°	63.4	109.4	120.7	117.2	113.8
87.5°	26.1	36.5	29.5	20.8	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)