

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: P474636

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474636
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-SQR-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5229.1 lumens
Efficiency: N/A
Efficacy: 140.9 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

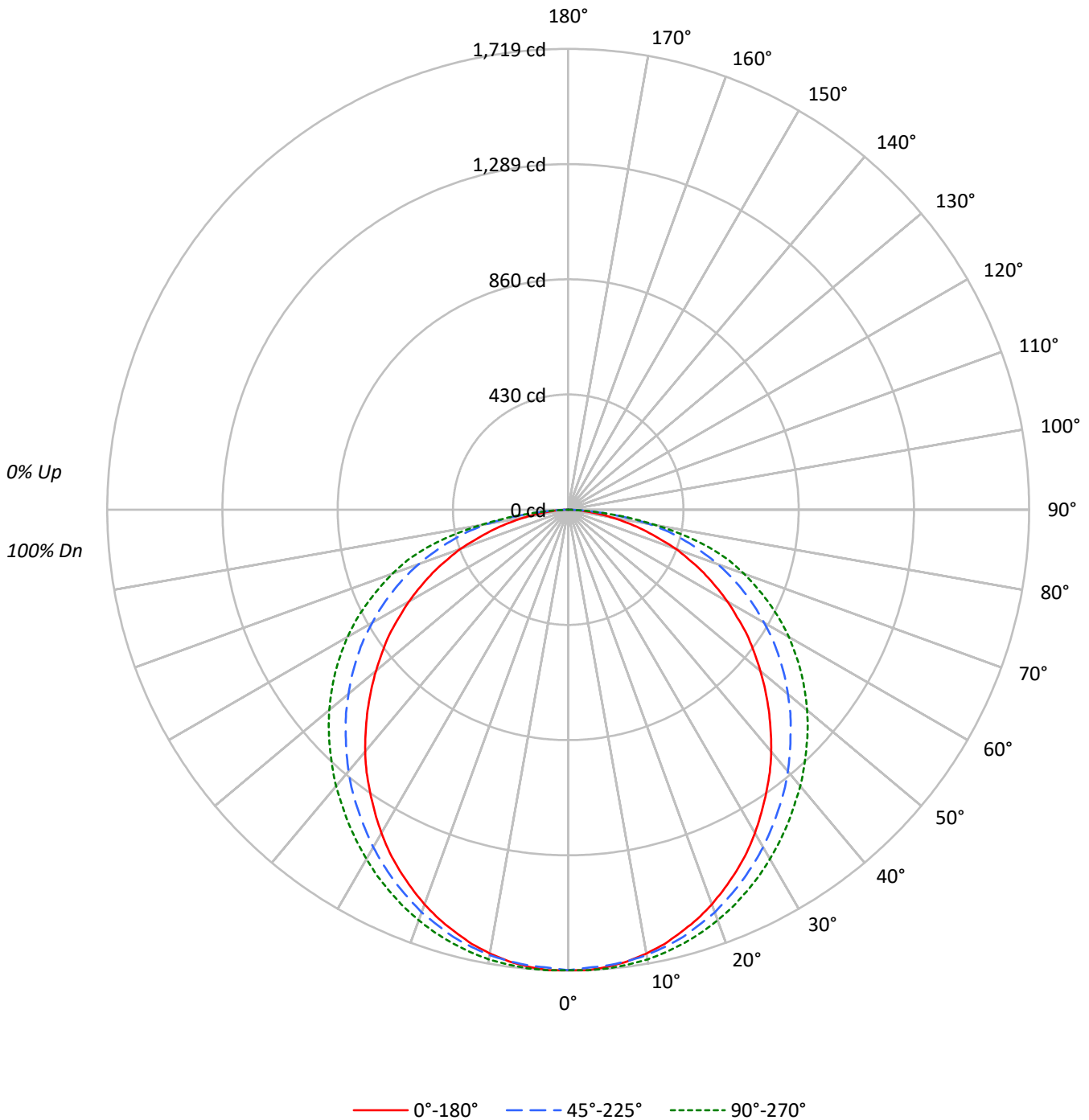
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4622	4622	4622
5°	4622	4608	4640
10°	4593	4609	4655
15°	4543	4599	4662
20°	4486	4576	4668
25°	4413	4544	4668
30°	4327	4517	4675
35°	4229	4490	4693
40°	4138	4475	4731
45°	4025	4464	4781
50°	3917	4477	4868
55°	3826	4507	4978
60°	3696	4541	5117
65°	3548	4596	5272
70°	3365	4660	5482
75°	3014	4726	5663
80°	2537	4739	5140
85°	1883	3585	3378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.8	3.1
10°-20°	466.5	8.9
20°-30°	706.2	13.5
30°-40°	854.2	16.3
40°-50°	901.7	17.2
50°-60°	850.3	16.3
60°-70°	701.0	13.4
70°-80°	459.9	8.8
80°-90°	126.5	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°	1335.4	25.5
0°-40°	2189.7	41.9
0°-60°	3941.7	75.4
0°-90°	5229.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5229.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1718	1718	1718	1718	1718	
5°	1711	1711	1706	1718	1718	162
15°	1631	1640	1651	1670	1673	460
25°	1486	1505	1530	1562	1572	684
35°	1287	1321	1367	1414	1428	806
45°	1058	1105	1173	1236	1256	816
55°	815	873	961	1033	1061	726
65°	557	624	722	799	828	550
75°	290	364	454	526	545	306
85°	61	105	116	113	109	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1717.6	1717.6	1717.6	1717.6	1717.6
2.5°	1719.3	1717.6	1710.1	1720.1	1719.3
5°	1710.9	1710.9	1705.9	1717.6	1717.6
7.5°	1699.2	1700.0	1698.4	1711.7	1711.7
10°	1680.8	1684.2	1686.7	1701.7	1703.4
12.5°	1659.1	1665.0	1670.0	1688.4	1690.0
15°	1630.7	1639.9	1650.8	1670.0	1673.3
17.5°	1601.5	1612.3	1624.0	1649.1	1653.3
20°	1566.4	1578.9	1598.1	1623.2	1629.9
22.5°	1527.1	1544.7	1564.7	1594.8	1603.1
25°	1486.2	1504.6	1530.5	1562.2	1572.2
27.5°	1441.9	1463.6	1492.9	1529.6	1540.5
30°	1392.6	1417.7	1453.6	1492.9	1504.6
32.5°	1340.8	1370.1	1410.2	1453.6	1467.0
35°	1287.4	1320.8	1366.7	1413.5	1428.5
37.5°	1234.7	1268.1	1322.4	1371.7	1385.9
40°	1177.9	1214.7	1274.0	1326.6	1346.7
42.5°	1117.8	1161.2	1223.9	1282.3	1301.6
45°	1057.6	1105.2	1172.9	1235.6	1256.4
47.5°	996.6	1049.3	1123.6	1187.1	1211.3
50°	935.7	991.6	1069.3	1137.8	1162.9
52.5°	873.8	932.3	1016.7	1089.4	1111.9
55°	815.4	873.0	960.7	1032.6	1061.0
57.5°	747.7	812.8	905.6	978.3	1005.8
60°	686.7	750.2	843.8	920.6	950.7
62.5°	620.7	685.9	784.4	861.3	890.5
65°	557.2	624.0	721.8	798.6	827.9
67.5°	488.7	558.9	659.1	733.5	761.9
70°	427.7	493.7	592.3	668.3	696.7
72.5°	353.4	428.6	523.0	598.1	629.1
75°	289.9	364.2	454.5	526.3	544.7
77.5°	223.1	297.4	386.8	433.6	446.1
80°	163.7	233.9	305.8	330.8	331.7
82.5°	110.3	172.1	213.0	225.6	223.9
85°	61.0	105.3	116.1	112.8	109.4
87.5°	25.1	35.1	28.4	20.0	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)